

Volume

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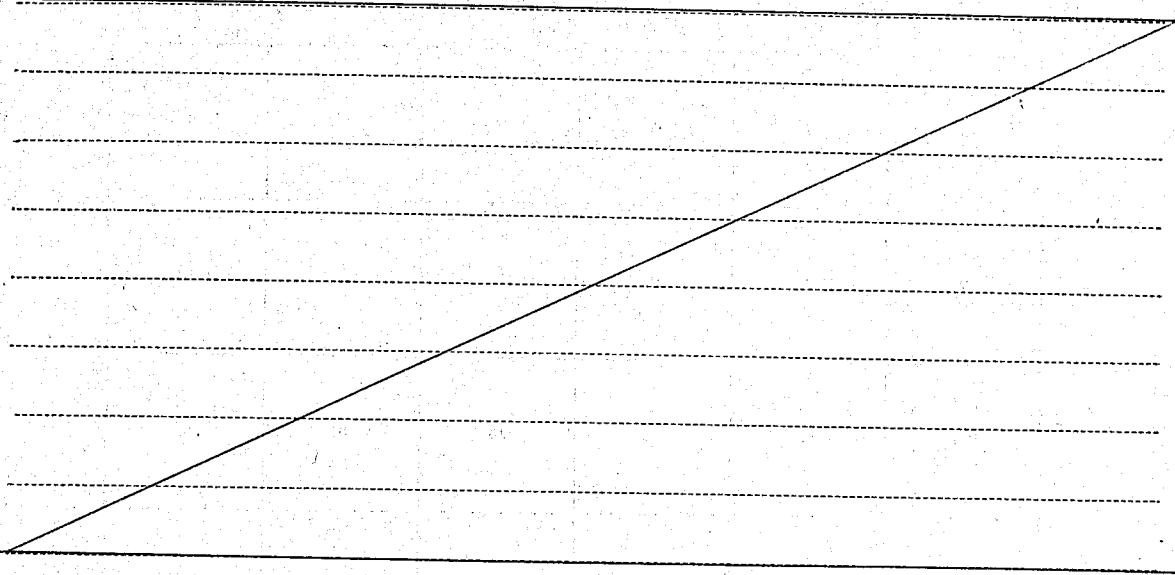
FIELD NOTES

OF THE SURVEY OF THE

NORTH AND WEST BOUNDARIES, AND THE RETRACEMENT

OF THE SOUTH BOUNDARY OF

T.39 S., R.22 E.



Of the Salt Lake Base and Meridian,
In the State of UTAH.

EXECUTED BY

Daniel B. Miller and Jos. C. Thoma,

In the capacity of U.S. Surveyor's, under instructions dated March 26th, 1912,
issued by the United States Surveyor General to govern surveys included in
Group No. 16, which were approved by the Commissioner of the General Land
Office, April 2, 1912.

Survey commenced April 26th, 1912.

Survey completed May 2nd, 1912.

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INDEX DIAGRAM.

Township _____ Range _____

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Retracement of the S.Bdy. of T. 39 S., R. 22 E.

Survey commenced April 26, 1912, and executed with a Young & Sons light mountain transit No. 8146, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs. The instrument was examined, tested on the true meridian at Salt Lake City, by the U.S. Surveyor, and found correct. I examine the adjustments of the transit, and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours, with a meridian determined by observations on Polaris, I proceed as follows:

At my camp which is located in about the center of sec. 29. T. 39 S. R. 22 E. of the Salt Lake B. and M., in approximate lat. $37^{\circ}24'N.$; long. $109^{\circ}35'W.$, I set off $37^{\circ}24'N.$ on the lat. arc; $13^{\circ}33'30''N.$ on the decl. arc; and at 8:30 a.m. l.m.t., determine with the solar a meridian and mark a point thereof on a stake firmly set in the ground six chains north of my station.

At the same station I set off $37^{\circ}24'N.$ on the lat. arc; $13^{\circ}39'N.$ on the decl. arc; and at 3:30 p.m. l.m.t., mark a point in the meridian determined with the solar by a mark on the stake already set six chains N. of my station; this mark falls 0.3 ins. E. of the meridian established by the a.m. solar.

Clouds obscure the sky in the evening, preventing observation on Polaris.

April 26, 1912.

April 27: At 5h 11m a.m. l.m.t., I observe Polaris at eastern elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a stake driven in the ground 6 chs. N. of my station.

Retracement of the S.bdy.of T.39 S., R.22 E.

At 8h a.m.l.m.t., I lay off the azimuth of Polaris $1^{\circ}28'$ to the west, and mark the meridian thus determined by marking the stake set 6 chs.N.of my station, on which the meridian falls 0.3 ins.west of the p.m. and intersects the a.m.meridian, as determined with the solar apparatus, which defines positions for the meridian, respectively about $0'16''$ east and $0'16''$ west of the meridian established by Polaris observations; therefore I conclude that the adjustments of the instrument are satisfactory.

All measurements were made with a Chicago steel tape, four chains long, which was tested with the standard at Salt Lake City, April 8, 1912, and found correct.

From the cor.of secs.4,5,32, and 33, Tps.39 and 40 S., R. 22 E., herein described, I retrace West on the S.bdy.of sec.32, and at 40.03 chs.fall 3 lks.S.of the $\frac{1}{4}$ sec.cor. and at 80.04 chs.fall 6 lks.S.of the cor.of secs.5,6,31 and 32; therefore the line bears N. $89^{\circ}57'W$.80.04 chs.

From the cor.of secs.5,6,31 and 32, Tps.39 and 40 S., R. 22 E., I retrace West on the S.bdy.of sec.31; and at 40.00 chs.fall 7 lks.S.of the $\frac{1}{4}$ sec.cor.; and at 79.51 chs.fall 14 lks.S.of the cor.of Tps.39 and 40 S., Rgs. 21 and 22 E.; therefore the line bears N. $89^{\circ}54'W$. The cor.of Tps.39 and 40 S., Rgs.21 and 22 E. is a sandstone 6x6x18 ins.buried in the sand; mkd. with 6 notches on the N.S.E. and W.edges; 40 on the SF., 21 on the SW., 22 on the NE. and 39 on the NW.faces. No accessories. On account of the drift sand in this locality, I destroy this cor., and in its place I set an iron post 3 ft.long, 3 ins. diam. 24 ins. in the ground, for the cor.of Tps.39 and 40 S., Rgs.21 and 22 E., on the brass cap mkd.

T39S	T39S
R21E	R22E
S 36	S 31
S 1	S 6
R21E	R22E
40S	40S

1912

Dig pits 24x24x12 ins.on each line N.F. and W.4 ft. and S. of post 6 ft. deep.; and raise a mound of earth 5 ft. base 2 ft. high S.of cor.

April 27, 1912

Jos. C. Thomas
S. Surveyor.

Retracement of part of the S. bdy. of T. 39 S. R. 22 E.

Survey commenced April 26th, 1912 and was executed with A. Keuffel & Esser, Engineers solar transit No. 20037, with solar attachment, the horizontal limb of which is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the ^{1st}, and dec. arcs.

The instrument was tested by me as Assistant Supervisor of Surveys, on the true meridian at Salt Lake City, Utah, January 22nd, 1912 and found correct.

I examine the adjustments of the transit and correct the level and collimation errors; then to test the solar apparatus, by comparing its indications, resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observation on Polaris, I proceed as follows.

At my camp which is situated in about the center of sec. 29, T.39 S.R.22E. Salt Lake Base and Meridian, approximate lat. $37^{\circ}23'30''$ N. Lon. $109^{\circ}35'W$.I set off $37^{\circ}23'30''$ On the Lat.arc; $13^{\circ}32'30''$ N.on the dec.arc, and determine a meridian,at 9h.a.m.l.m.t.and mark a point in a hub in line therewith about six chains N.of my observation station. At 11 h,57m.12 s.a.m.l.m.t.I set off $13^{\circ}35'N$.on the dec. arc, and observe the sun on the meridian,from which the reading of the lat.arc is $37^{\circ}23'30''$.

At the same point at 2h.30m.p.m.l.m.t.with the lat.arc. set the same, and the dec.arc set at $13^{\circ}37'30''N$. I find the solar meridian falls on the point on the hub set north of the station this morning.

The clouds obscured the sky in the eveng.preventing observation of Polaris.

Apr.27:at 5h.11m.a.m.l.m.t. I observe Polaris, at E.elong. in accordance with instructions in the manual and mark a point in line therewith on a hub opposite the meridian obtained by solar observations yesterday.

At 8h.a.m.l.m.t.I turn off the azimuth of Polaris $1^{\circ}28'$

Retnacement of part of the S.boundary of T.39 S.R.22 E.

Chains.	<p>to the West, the meridian thus determined falling on the point secured by solar observations yesterday.</p> <p>I therefore conclude that the adjustments are in satisfactory condition.</p> <p>All measurements were made with a Lufkin steel tape four chains long, which was tested by me on the standard at Salt Lake City April 8th, 1912 and found correct.</p> <p>The magnetic bearing of the true meridian at 8 h.15m. a.m. is N. $14^{\circ}22'$ W. the angle thus determined gives the mag.decl. $14^{\circ}22'$ E.</p> <p>At the corner of secs. 4,5,32 and 33 on the S.bdy of the township, which is a sandstone, 8 X 10 X 16 ins. above ground, firmly set, marked with 2 notches on the W. side and 4 on the E. side, with a small mound of stone W. which I rebuilt the proper size, and at 10h.30m.a.m.l.m.t.I set off $37^{\circ}22'30''$ on the lat.arc; $13^{\circ}53'N$ on the dec.arc and determined a meridian with the solar.</p> <p>Thence I retrace</p> <p>East bet. secs. 4 and 33.</p> <p>Fall 9 lks N. of the $\frac{1}{4}$ sec. cor.</p> <p>A sandstone 4 X 10 X 10 ins. above ground, firmly set, marked $\frac{1}{4}$ on the N. face, and mound of stone N.of cor.</p> <p>Fall 18 lks.N. of the corner of secs. 3,4,33 and 34.</p> <p>A sandstone, 7 X 12 X 10 ins. above ground, properly mkd. Mound of stone, W. of the corner.</p> <p>The bearing of this line is therefore, S. $89^{\circ} 52'$ E. 79.96 chs.</p> <hr/> <p>From this cor. I run</p> <p>East bet. secs. 3 and 34.</p> <p>Fall 8 lks. N. of the $\frac{1}{4}$ sec. cor.</p> <p>A sandstone, 4 X 8 X 10 ins. above the ground, supported by a mound of stone. Mound of stone N. of cor.</p> <p>Fall 16 lks.N. of the corner of secs. 2,3,34 and 35.</p> <p>A sandstone, 6 X 10 X 10 ins. above ground, marked with 2 notches on E. face, and 4 on W. face.</p> <p>A mound of stone W. of the corner.</p>
40.06	
79.96	
40.10	
80.04	

Retracement of part of the S. bdy. of T. 39 S., R. 22 E.

Chiina.

The course of this line is therefore, S. $89^{\circ}53' E.$ 80.04 chs.
 April 27, 1912:
 At this corner at 11h 58m A.m. l.m.t. I set off $13^{\circ}54'30''$
 N.on the dec.arc; and observe the sun on the meridian.
 The latitude arc. reads $37^{\circ}22'30''$ which is the proper
 latitude, nearly.

From this cor. I run east, bet. secos. 2 and 35.

40.00 Fall 32 lvs.N.of the $\frac{1}{4}$ sec.cor. which is a sandstone
 $6 \times 10 \times 12$ ins.above ground, properly marked, firmly set,
 with a mound of stone N.of the cor.

39.97 Fall 14 lvs.N.of the cor.of secos. 1,2,35 and 36.
 A granite $7 \times 18 \times 12$ ins.above ground,properly mkd.
 firmly set,with a mound of stone W. of the cor.

Course of first half-mile is therefore S. $89^{\circ}32'7.40.00$ chs.
 and second half-mile N. $89^{\circ}45' F.$ 39.97 chs.
 At this corner at 4h.j.m. appt. I set off $37^{\circ}23'30''$ on
 the 1st. arc; $13^{\circ}56'30''N.$ on the dec.arc and determine
 a meridian with the solar.The meridian thus secured con-
 firming the bearing of the line as run.

April 27, 1912.

Daniel B. Miller,

U. S. Surveyor.

I proceed to the cor. of secos. 1, 2, 35 and 36, T.pn.

39 and 40 S., R. 22 E., above described,April 28,1912.

From this cor. I run east, bet. secos. 1 and 36.

39.94 Fall 3 lvs. N. of the $\frac{1}{4}$ sec. cor., which is
 a sandstone, $18x6x15$ ins. above ground, firmly set,mkd.
 $\frac{1}{4}$ on the N. face. Mound of stone W. of cor. The bearing
 of this line is therefore S. $89^{\circ}57' E.$ 39.94 chs.

From the $\frac{1}{4}$ cor. bet. secos. 1 and 36, I run East.

39.74 Intersect the Colo. Guide Meridian 5 lvs. N. of the cor.
 of T.pn. 39 and 40 S., Rgs. 22 and 23 E., which is
 a sand stone $24x10x36$ ins. above ground, firmly set in
 mound of stone;mkd.with 6 notches on the N.,S.,E.
 and W. edges. COLO G M T39S on the NW., R23E on the NE.,
 and R22E T40S on the SW. faces. mound of stone S. of
 cor. the bearing of this line is therefore S. $89^{\circ}56' E.$
 39.74 chs.

Survey of the West bdy. of T. 39 S., R. 22 E.

- Chains. Enroute from one part of work to another at noon, impossible to take latitude observation April 28: I begin at the cor. of Tps. 39 and 30 S., Rgs. 21 and 22 E., which I established April 27, 1912.
- At this cor. I set off $37^{\circ} 22' 30''$ N. on the lat. arc, $14^{\circ} 15' 30''$ N. on the decl. arc, and at 2h 28m p. m., l.m.t., determine the meridian with the solar.
- Thence I run North, bet. secs. 31 and 36.
- Desc. over rolling mesa covered with greasewood undergrowth.
- 1.50 Draw, 20 lks. wide (dry) drains SW.; asc.
- 4.00 Top of rolling mesa, bears NE. and SW.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor.; with a brass cap mkd.
- | | | |
|-----|---------------|-----|
| S36 | $\frac{1}{4}$ | S31 |
|-----|---------------|-----|
- 1912.
- Dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 79.00 Start gradual desc., bears NE. and SW.
- 80.00 Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 25, 30, 31 and 36, with brass cap mkd.
- | | | |
|--------|---------|---------------|
| R 21 E | T 39 S. | R 22 E |
| S. 25 | \| | S. 30 |
| <hr/> | | S. 36 \| S. 31 |
- 1912
- Dig pits, 18x18x12 ins., in each sec. $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high W. of cor.
- Land Rolling
- Soil, sandy; 3rd rate, No timber. Undergrowth, greasewood.
- North, bet. secs. 25 and 30.
- Desc. over gently rolling mesa, through scattering greasewood undergrowth.
- 40.00 Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
- | | | |
|-------|---------------|-------|
| S. 25 | $\frac{1}{4}$ | S. 30 |
|-------|---------------|-------|

Survey of the W. bdy. of T. 39 S., R. 22 E.

Chains.

Dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

- 47.90 Dry draw, 10 lks. wide, course W.; asc. gradually.
- 49.00 Top of asc., bears E. and W.; desc. gradually over sand stone ledges.
- 50.00 True point for the cor. of secs. 19, 24, 25 and 30, falls on top of a large sand stone boulder on which I mark a small witness post; 3 links. W. of this point I set the witness cor. which is An iron post, 3 ft. long, 3 ins. in diam., set in a mound of stone, wedges against the W. side of the large boulder; mdkd.

	T 39 S
R 21E	R 22E
S 24	S 19
S 25	S 30
WC	

1912

Land rolling.

Soil, sandy; 3rd rate. No timber.

Undergrowth, greasewood. April 28, 1912.

At the cor. of secs. 19, 24, 25 and 30, T. 39 S., Rgs. 21 and 22 E., I set o April 29: I set off $37^{\circ} 24' N.$ on the lat. arc, $14^{\circ} 30' E.$ on the decl. arc, and at 7.57 a. m., 1. m. t., determine the meridian with the solar.

Thence I run

N. 10° 20' E. bearing, 160 ft. above creek bed, bet. secs. 19 and 24.

Desc. over sand stone ridges.

- 2.50 Start abrupt desc. to Cottonwood Creek, bears NE. and SW.
- 4.00 Bottom of abrupt desc., 60 ft. below cor.; continue over sandy creek bottom.
- 10.00 Cottonwood Creek, 30 lks. wide; muddy water, 1 ft. deep; gentle current, sandy bottom; course SW.
- 12.50 Left bank of Cottonwood Creek 40 ft. high.; asc. over sandstone ledges. bears NW. and SW.; desc.
- 18.50 Sand stone ledge, 60 ft. above Creek, bears NE. and SW.; desc.
- 27.00 Bottom of steep desc. desc. gradually over rolling mesa.

Survey of the W. bdy. of T. 39 S., R. 22 E.

Chains. Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in 40.00 the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S24 | S19

1912

Dig pits, 18x18x12 ins., N. and S. of cor. 3 ft. dist.; and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.

71.50 Draw, drains SE.; continue slight asc.

80.00 Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 13, 18, 19 24, with a brass cap mkd.

T 39 S.
R 21 E | R 22 E

S 13 | S 18

S 24 | S 19

1912

Raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ high W. of cor.

Soil, sandy and stony; 3rd rate.

Land rolling. No timber.

North, bet. secs. 13 and 18.

Desc. gradually over rolling land devoid of vegetation.

4.00 Bottom of gradual desc., bears E. and W.; asc. gradually over gently rolling land covered with scattering grease-wood undergrowth.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor.; with a brass cap mkd.

S 13. | S 18

1912

Raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor. 80.00 Point for cor. falls on solid bed rock on which I mark a

10 lks. N. I set

An iron post, 3 ft. long, 3 ins. diam., 24 ins. in the

ground for the witness cor. to the cor. of secs. 7, 12, 13 and 18, with brass cap mkd.

T 39 S.

R 21 E | R 22 E

S 12 | S 7

S 15 | S 18

1912

Survey of the W. bdy. of T. 39 S., R. 22 E.

Chains.

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of
sec. 12; adobe soil; limestone, light-colored, hard.
cor.

Land rolling.

Soil, stony; 4th rate. No timber. Undergrowth, greasewood.

North, bet. secs. 7 and 12.

Desc. over rolling land along gentle E. slope

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor.; with a brass cap mkd.

S 12	S 7
------	-----

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of
sec. 12; adobe soil; limestone, light-colored, hard.
cor.

60.00 Start steep asc. over rocky ridge, covered with scatter-
ing scrub cedar timber, bears NE. and SW. Descend.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., in mound
of stone on bed rock, for the cor. of secs. 1, 6, 7,
and 12; with a brass cap mkd.

T 39 S	
R 21 E	R 22 E
S 1	S 6

S 12 S 7

1912

from which

A cedar, 24 ins. in diam., bears N. $50^{\circ} 15' E.$, 52
lks. dist.; mkd. T39S R22E S6 BT.

A cedar, 10 ins. in diam., bears S. $50^{\circ} 30' E.$, 6 lks.
dist.; mkd. T39S R22E S7 BT.

A cedar, 8 ins. in diam., bears S. $73^{\circ} W.$, 96 lks.
dist.; mkd. T39S R21E S12 BT.

A cedar, 20 ins. in diam. bears N. $50^{\circ} 30' W.$, 38
lks. dist.; mkd. T39S R21E S1 BT.

Land, rolling. Timber, scattering cedar.

Soil; adobe and covered with volcanic rock; 4th rate.

April 29: At this cor. I set off $37^{\circ} 27' N.$ on the lat.
arc; $14^{\circ} 34' 30'' N.$ on the decl. arc, and at 12h27m, p.m.

1. m. t., determine the meridian with the solar.

Thence I run

Survey of the W. bdy. of T. 39 S., R. 22 E.

Chains.	North, bet. secs. 1 and 6. Desc. over rolling land, covered with scattering cedar timber.
11.00	Bottom of desc., bears E. and W.; asc. gradually over rocky slope, draining S. and E.; leave scattering cedars.
36.00	Top of asc., bears E. and W.; desc. gradually.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., in mound of stone on bed rock; with brass cap mkd.
	S 1 S 6 | 1912
	Raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
44.00	Bottom of gradual desc.; asc. gradually over rocky slope covered with scattering cedar timber, bears E. and W.
68.00	Leave scattering cedar timber, bears E. and W.
73.00	S. edge of canon 300 ft. deep, bears E. and W.; desc. over rim.
80.00	In the bottom of canon, I set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for the cor. of Tps. 38 and 39 S., Rgs. 21 and 22 E., with brass cap mkd.
	T 38 S | R 21 E R 22 E S 36 S 31 | S 1 S 6 | T 39 S
86	At "36" M. a cedar, 12 ins. in diam. bears N. 80° E., 27 lks. dist. mkd. T38S R22E S31 BT.
86	A + on a large granite boulder bears S. 53° 30' E., 45 lks. dist.; mkd. + BO.
86	A + on a large sand stone boulder bears S. 51° W., 27 lks. dist.; mkd. + BO.
	A cedar, 10 ins. in diam. bears N. 44° W., 37 lks. dist.; mkd. T38S R21E S36 BT.
	Land, rolling. Soil 3 to 6 in. deep, light brown, sandy loam. Soils stony; 4th rate.
	Timber, scattering cedar.
	April 29, 1912.

NORTH BOUNDARY OF T. 39 S., R. 22 E.

In order to economize in time, the random north boundary of T. 39 S., R. 22 E., was run east instead of west, as the location of the corner of Tps. 38 and 39 S., Rgs. 22 and 23 E., was not known and could not be located without considerable loss of time.

May 1, 1912: At 3h 27m p.m., l.m.t., I set off $37^{\circ}28'N.$ on the lat. arc; $15^{\circ}12'N.$ on the decl. arc; and determine a meridian with the solar at the corner of Tps. 38 and 39 S., Rs. 21 and 22 E., heretofore described.

Thence I run

East, on a random line, along the north boundary of T. 39 S., setting temporary $\frac{1}{4}$ and sec. cors. at intervals of 40 chs.

78.97

The temp. cor. of secs. 5, 6, 31 and 32.

May 1, 1912.

May 2, 1912: At 7h 57m a.m., l.m.t., I set off $37^{\circ}28'N.$ on the lat. arc; $15^{\circ}24'30''N.$ on the decl. arc; and determine a meridian with the solar at the temp. cor. of secs. 5, 6, 31 and 32.

Thence I run

East, continuing my random line along the north boundary of T. 39 S., setting temp. $\frac{1}{4}$ and sec. cors. at intervals of 40 chs.

May 2, 1912: At the temp. cor. of secs. 3, 4, 33 and 34, I set off $15^{\circ}27'N.$ on the decl. arc; and at apparent noon, observe the sun on the meridian; the resulting lat. is $37^{\circ}28'N.$

May 2, 1912: At 2h 57m p.m., l.m.t., I set off $37^{\circ}28'N.$ on the lat. arc; $15^{\circ}29'30''N.$ on the decl. arc; and at the temp. cor. of secs. 2, 3, 34 and 35, determine a meridian with the solar.

At 484.56 chs. from the township cor., I fall 15 lks. S. of what I take to be the corner of Tps. 38 and 39 S., Rgs. 22 and 23 E., which is

NORTH BOUNDARY OF T. 39 S., R. 22 E.

Chains A sandstone, 20 x .6 x 15 ins. above ground, firmly set; marked as described by the surveyor general. No accessories.

May 2, 1912.

May 7, 1912: The corner of Tps. 38 and 39 S., Rs. 22 and 23 E., established subsequent to the running of the random N. bdy. of T. 39 S., R. 22 E., falls 86 lks. south, and 5.61 chs. west from what I took to be the corner of Tps. 38 and 39 S., Rs. 22 and 23 E., on May 2. (See book "C", page 5, of this Group.) Therefore, the true falling of my random N. bdy. of T. 39 S., R. 22 E., is 71 lks. N. of the re-established corner of Tps. 38 and 39 S., Rs. 22 and 23 E., on the Colorado Guide Meridian.

The falling answers to a correction of 5', 12 lks. per mile, or S. $89^{\circ}55'W.$, counting from the NW. corner of the township, and the distance is 478.95 chs.

May 7, 1912.

May 11, 1912:

N. $89^{\circ}55'W.$, on a true line bet. secs. 1 and 36, from the re-established cor. of Tps. 38 and 39 S., Rs. 22 and 23 E.

Descend gradually over gently rolling land, through sagebrush and greasewood undergrowth.

- | | |
|-------|--|
| 28.00 | Right bank of Recapture Creek, 30 ft. high, bears N. and S. |
| 29.00 | Recapture Creek, 50 lks. wide, 2 ft. deep, water muddy, course S. |
| 30.00 | Left bank of Recapture Creek, 30 ft. high, bears N. and S.; ascend over gently rolling mesa. |
| 40.00 | Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor., with brass cap |

NORTH BOUNDARY OF T. 39 S., R. 22 E.

13

Chains	marked
	$\frac{1}{4}$
	S 36
	S 1
	1912
	Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
60.00	Base of broken slope, bears NE. and SW.; ascend over broken S. slope of mesa.
80.00	Set an iron post, 3 ft. long, 3 ins. diam., in mound of earth and stone on solid rock, for the cor. of secs. 1, 2, 35 and 36, with brass cap marked
	T 38 S R 22 E S 35 | S 36 S 2 | S 1 T 39 S 1912
	Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	Land, rolling and broken slope of mesa.
	Soil, adobe and stony; 4th rate.
	Undergrowth, sagebrush and greasewood.
	Timber, scattering scrub cedar.
<hr/>	
	N. $89^{\circ}55'W.$, on a true line bet. secs. 2 and 35.
	Ascend over broken land, covered with sagebrush, greasewood and scattering scrub cedar timber.
1.00	Rim of mesa, 40 ft. high, bears N. $70^{\circ}E.$ and S. $70^{\circ}W.$; ascend gradually.
2.00	Top of spur of mesa, projects S.; descend.
16.00	Dry draw, 20 lks. wide, 100 ft. below top of mesa, drains S.; ascend.
23.00	Rim of spur, 40 ft. high, bears N. and S.; ascend gradually.
24.00	Top of spur of mesa, projects S.; descend.
30.00	Dry draw, 10 lks. wide, 80 ft. below top of spur, drains S.; ascend.

NORTH BOUNDARY OF T. 39 S., R. 22 E.

Chains	
35.00	Start abrupt ascent over broken S. slope of mesa, bears N. and S.
39.70	Bluff-Grayson wagon road, bears N. and S.
40.00	Set an iron post, 3 ft. long, 1 in. diam., in mound of earth and stone, on solid bed rock, for $\frac{1}{4}$ sec. cor., with brass cap marked
	$\frac{1}{4}$ S 35 <hr/> S 2 1912
	Raise a mound of stone, 12 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
41.00	Bluff-Grayson telephone line, bears N. and S.
80.00	Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground for the cor. of secs. 2, 3, 34 and 35, with brass cap marked
	T 38 S R 22 E S 34 | S 35 <hr/> S 3 | S 2 T 39 S 1912
	Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	Land, mountainous.
	Soil, adobe and covered with large boulders; 4th rate.
	Undergrowth, sagebrush and greasewood.
	Timber, scattering scrub cedar.
	May 11, 1912.

May 13, 1912:

N. $89^{\circ}55'W.$, on a true line bet. secs. 3 and 34.

Descend over broken south slope of mesa, through scattering scrub cedar and pinon timber.

12.00 Bottom of abrupt descent, bears E. and W.; continue over rolling land.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in

Chains

the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
S 34

S 3
1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

- 44.00 East edge of canon, bears N. and S.; descend abruptly.
- 45.50 Bottom of canon, 100 ft. below east edge; 20 lks. wide, drains S.; ascend abruptly.
- 47.00 West edge of canon, 150 ft. above bottom, bears N. and S.; ascend gradually.
- 51.00 Spur of ridge, projects S.; descend.
- 61.00 Dry wash, 5 lks. wide, drains S.; ascend gradually.
- 69.50 East edge of canon, bears N. and S.; descend abruptly.
- 71.50 Bottom of canon, 100 ft. below E. edge, drains S.; ascend.
- 73.50 West edge of canon, 100 ft. above bottom, bears N. and S.; continue over broken S. slope.
- 80.00 Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of secs. 3, 4, 33 and 34, with brass cap marked

T 38 S
R 22 E
S 33 | S 34
---+---
S.4 | S 3
T 39 S
1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land, mountainous.

Soil, adobe and stone; 4th rate.

Undergrowth, scattering greasewood.

Timber, scattering scrub cedar and pinon.

N. $89^{\circ}55'W.$, on a true line bet. secs. 4 and 33.

Ascend over nearly level mesa, covered with sagebrush,

NORTH BOUNDARY OF T. 39 S., R. 22 E.

Chains

greasewood, and scattering scrub cedar and pinon timber.

- 1.00 West edge of mesa, bears N.50°W. and S.50°E.; descend abruptly over rocky SW. slope.
- 28.00 Bottom of abrupt descent, bears NW. and SE.; 300 ft. below top of mesa; descend gradually.
- 30.00 Dry draw, 10 lks. wide, drains S.; ascend gradually.
- 40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground for $\frac{1}{2}$ sec. cor., with brass cap marked

S 33

S 4
1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

- 43.00 Dry wash, 10 lks. wide, drains S.; continue gradual ascent.
- 45.00 Top of spur projects S.; descend over broken S. slope of mesa projecting from the N.
- 50.00 Dry wash, 10 lks. wide, drains S.; ascend over rocky slope.
- 66.00 East edge of mesa, bears N. and S.; enter dense cedar and pinon timber; ascend gradually over nearly level mesa.
- 76.00 West edge of mesa, bears N.30°W. and S.30°E.; descend abruptly.
- 80.00 Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs. 4, 5, 32 and 33, with brass cap marked

T 38 S	
R 22 E	
S 32	S 33
<hr/>	
S 5	S 4
T 39 S	
1912	

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land, mountainous.

NORTH BOUNDARY OF T. 39 S., R. 22 E.

Chains

Soil, adobe and rocky; 4th rate.

Undergrowth, sagebrush and greasewood.

Timber, scattering cedar.

May 13, 1912.

May 10, 1912:

N. $89^{\circ}55'W.$, on a true line bet. secs. 5 and 32.

Descend abruptly over mountainous land, covered with volcanic boulders.

16.00

Bottom of abrupt descent, bears NW. and SE.; descend gradually over rolling land, through greasewood undergrowth.

40.00

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked.

S 32

S 5
1912

Dig pits, 18 x 18 x 12 ins. E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

41.00

Dry wash, drains NW.; ascend gradually.

64.00

Right bank of Cottonwood Creek; sandstone cliff 200 ft. high, bears N. and S.

67.80

Cottonwood Creek, 40 lbs. wide, 18 ins. deep, muddy water, swift current.

69.50

Left bank of Cottonwood Creek, 40 ft. high, bears N. and S.; ascend gradually over rolling land.

80.00

Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of secs. 5, 6, 31 and 32, with brass cap marked

T 38 S

R 22 E

S 31 | S 32

— S 6 — S 5

T 39 S

1912

NORTH BOUNDARY OF T. 39 S., R. 22 E.

Chains

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 Land, gently rolling and mountainous.
 Soil, sandy, 64 chs.; volcanic and rocky, 16 chs.; 3rd and 4th rates.
 Undergrowth, greasewood.
 No timber.

N. $89^{\circ}55'W.$, on a true line bet. secs. 6 and 31.

Ascend gradually over rolling land covered with greasewood undergrowth.

10.00 Top of gradual ascent, bears NE. and SW.; ascend more abruptly.
 40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
S 31

S 6
1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

59.00 Top of spur, projects SE.; descend abruptly.
 68.80 Bottom of canon, 1 ch. wide, 100 ft. below top of spur, drains S. $60^{\circ}E.$; ascend.
 78.95 The cor. of Tps. 38 and 39 S., Rs. 21 and 22 E., heretofore described.

May 10, 1912.

For general description see notes of the subdivision of this township.

BOUNDARIES OF T. 39 S., R. 22 E.

Latitudes, Departures, and Closing Errors.

Lines Designated	True Bearing	Dist.	Latitudes		Departures	
			N.	S.	E.	W.
		chs.	chs.	chs.	chs.	chs.
West Boundary	North	480.00	480.00	.....	.....	.....
North Boundary	S. 89° 55' E.	478.95	.....	.... 71	478.95	.....
Colo. Guide Meridian	South	480.00	.....	480.00	.....	.....
South Boundary	N. 89° 56' W.	39.74	.05	.....	.....	39.74
" "	N. 89° 57' W.	39.94	.03	.....	.....	39.94
" "	S. 89° 45' W.	39.97	.....	.18	.....	39.97
" "	N. 89° 32' W.	40.00	.33	.....	.....	40.00
" "	N. 89° 53' W.	80.04	.16	.....	.....	80.00
" "	N. 89° 52' W.	79.96	.19	.....	.....	79.96
" "	N. 89° 57' W.	80.04	.07	.....	.....	80.04
" "	N. 89° 54' W.	79.51	.14	.....	.....	79.51
Convergency					.55	
	Totals		480.97 480.89	480.89	479.50 479.16	479.16
Error in lat. and dep.				.08		.34

Jos. C. J. Roma
U. S. Surveyor.

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Page

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability,
....., U. S. Surveyor, during the periods and in the capacities
stated opposite our several signatures, in surveying all those parts or portions of
For certificates of assistants see book "VIT. 39 S., R. 26 E.",

of the Meridian, in the State of

which are represented in the foregoing field notes as having been executed by him, and under his direction; and that said survey has been, in all respects, to the best of our knowledge and belief, well and faithfully executed.

Subscribed and certified to before me on the dates of the final service as shown above

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____, bearing date of the _____ day of _____, 191_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____.

For final oaths of U. S. Surveyors see book "V" T. 39, S., R. 26 E.

_____ of the _____
Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191_____
}



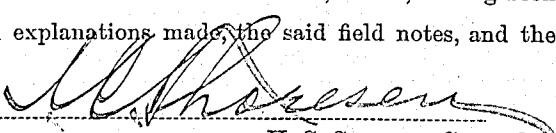
APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

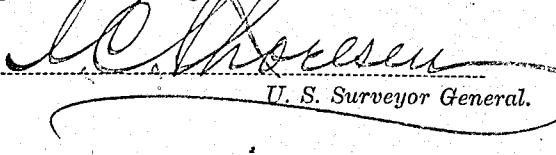
Salt Lake City, Utah, June 2, 1915.

The foregoing field notes of the survey of the North and West, and retracement of the South boundaries of Township No. 39 South, Range No. 23 East, of the Salt Lake Base and Meridian, Utah,

executed by Daniel B. Miller and Joseph C. Thoma
under their special instructions dated March 26, 1912, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the and retracement surveys they describe, are hereby approved.


U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.


U. S. Surveyor General.

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FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISIONAL LINES OF

T. 39 S., R. 22 E.

Of the Salt Lake Base and Meridian,

In the State of UTAH.

EXECUTED BY

Daniel B. Miller and Jos. C. Thoma,

In the capacity of U.S. Surveyor, under instructions dated March 26, 1912,
issued by the United States Surveyor General to govern surveys included in
Group No. 16, which were approved by the Commissioner of the General Land
Office, April 2, 1912, pursuant to authority contained in the Act of
Congress dated , 191 .

Survey commenced April 29, 1912

Survey completed May 10, 1912

BOOK A-412

INDEX DIAGRAM.

Township _____, *Range* _____

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Subdivision of T. 39 S.R. 22 E.

Chains

Note: For establishment of Polaris meridian and test of solar apparatus see Book "A" page 3, April 26 and 27.

The solar apparatus was tested at frequent intervals on my Polaris meridian during the subdivisional surveys and my watch regulated and adjusted at all times to local mean time within one minute.

April 29, 1912; At the cor. of secs. 1, 2, 35 and 36 on the S.bdy. of this township I set off $37^{\circ}22'30''$ on the lat. arc, $14^{\circ}31'N.$ on the decl. arc, and determine a meridian with the solar at 9h 57m a.m., l.m.t. Thence I run N. $0^{\circ}01'W.$ bet. secs. 35 and 36.

Over broken mountainous land draining W. into Recapture Creek. Sharp descent 75 ft.

- 24.00 Dry wash, 15 lks. wide, course NW. Ascend 150 ft.
 37.75 Sandstone wall, 20 ft. high, the S.rim of ridge, bears NW. and SE.
 40.00 Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in earth and stone for $\frac{1}{4}$ sec. cor. with a brass cap marked

$$\frac{1}{4} S\ 35 | S\ 36$$

1912

raise a mound of earth 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.

- 41.00 Top of low ridge bearing E. and E. Descend gradually.
 55.50 N.side of ridge. Desc. over rim rock 20 ft. brs. S. 70° E and SW.
 57.50 Left bank of Recapture Creek, 1.00 ch. wide, 1 ft. deep, course SW. An occasional cottonwood along creek bank. Over creek, open surface, bottom land, through greasewood.
 66.00 Begin steep ascent over large boulders E. and NW.
 67.00 Over sandstone ledge 15 ft. high bearing E. and W.
 72.25 Top. of ridge, 125 ft. above base bears NE. and SW. Desc. over surface sloping NW.
 80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in earth and stone for the cor. of secs. 25, 26, 35 and 36. Set on solid bed rock in mound of earth and stone 4 ft. base. and 2 ft. high, post marked

T 39 S R 22 E.

S 26 | S 25

S 35 | S 36

1912

SUBDIVISION OF T. 39 S.R. 22 E.

Chains

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of the cor.
Land mountainous and broken.
Soil rocky and sand deposit 4th class.
Scant vegetation. No timber.

S.89°56'E. on random line bet. secs. 25 and 36.

40.00 Set temp. 1 sec. cor.

79.41 Intersect Colo. Guide Mer. 1 $\frac{1}{4}$ lks.N.of the old cor.of secs. 25,30,31 and 36,hereinafter described on page 1,book C of this group.

April 29, 1912:At this cor.I set off 14°33'N.on the decl. arc, and at 11h 57m a.m.l.m.t., observe the sun on the meridian, the resulting lat. is 37°23'30"N., which is correct.

NOTE: This cor.was destroyed subsequent to the retracement and resurvey of the Colo.Guide Meridian on May 8,1912, and a new cor. re-established in lieu thereof, 25 lks.E. and 5 lks.N.of the old cor. See book "C", page 8.

April 29, 1912.

May 8, 1912:

N.89°52'W. on true line bet.secs.25 and 36,from the re-established cor.of secs.25,30,31 and 36.

Over hilly, sandy bench land.

20.00 Wash,15 lks.wide,dry, course S.60°W. Asc. gradually.

39.83 Set an iron post, 3 ft. long, 1 in.in dia.24 ins.in the ground and mound of stone for $\frac{1}{4}$ sec.cor.with brass cap mkd

1
S 25
S 36
1912

raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft.high N. of cor.

51.60 Top of asc. NE. and S. Denc.

55.00 Ledge rim 50 ft. high, bears N. and S.

Thence across canon bottom, through greasewood.

58.85 Left bank of Recapture Creek, course S.20°E. 1 ft. deep.

59.35 Right bank of same. An occasional cottonwood along creek.

69.00 Begin ascent over open broken E. side of bench.

70.20 Sandstone rim rock 25 ft. high, bears N.30°E.and S.30°W.

76.00 Top of ridge,100 ft.above creek, bears NE. and SW.

79.66 The cor. of secs. 25, 26, 35 and 36.

Land broken and hilly. Soil rocky and sandy light drift; 3rd and 4th rate. Scant vegetation. Poor grazing.

Subdivision of T. 39 S.R. 22 E.

Chains	April 29: At 2h 57m p.m.:l.m.t. I set off $37^{\circ}23'30''$ on the lat.arc and $14^{\circ}36'N.$ on the decl.arc, and determine a meridian with the solar at the cor. of secs. 25, 26, 35 and 36. Thence N. $0^{\circ}01'W.$ bet. secs. 25 and 26.
	Over broken bad land surface, draining W. into large wash. Descending gradually.
26.25	Wash 25 lks. wide, dry, course W. 4 chs., thence S. Ascend.
29.25	Rock spur, projects S. $60^{\circ}E.$
30.00	Same wash, 25 lks. wide, course SE. Asc. land sloping SW.
40.00	Set an iron post 3 ft. long, 1 in. in dia., $\frac{1}{4}$ ins. in earth and stone for the $\frac{1}{4}$ sec.cor. with a brass cap marked $\begin{array}{c|c} \text{T } 39 & \text{S R 22 E} \\ \text{S } 23 & \text{| S } 24 \\ \text{S } 26 & \text{| S } 25 \end{array}$ 1912 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
	Continue grad. asc. from cor. over stony and drift sand.
59.00	Low sandy ridge bearing N. $60^{\circ}E.$ and SW. Desc.
62.75	Wash dry 10 lks. wide, course W. Asc. 80 ft.
80.00	Top of ridge NE. and SW. Set an iron post, 3 ft. long, 2 ins. in dia., $\frac{1}{4}$ ins. in the ground for the cor. of secs. 23, 24, 25 and 26, with a brass cap marked $\begin{array}{c|c} \text{T } 39 & \text{S R 22 E} \\ \text{S } 23 & \text{| S } 24 \\ \text{S } 26 & \text{| S } 25 \end{array}$ 1912 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.
	Land broken and rolling. No timber. Soil light, drift sand and broken rocky ridges and bad land. Scant grazing. Little vegetation except greasewood.
	<u>April 29, 1912.</u>
April 30, 1912:	I run
	S. $89^{\circ}52'E.$ on random line bet. secs. 24 and 25.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.73	Intersect the Colo. Guide Meridian, 3 lks. S. of the old cor. of secs. 19, 24, 25 and 30, hereinafter described in book C, page 2 of this group.
April 30:	At this cor. at 9h 57m a.m.:l.m.t. I set off $37^{\circ}24'N.$ on the lat.arc, $14^{\circ}48'30''N.$ on the decl.arc, and determine a meridian with the solar.
NOTE:	This cor. was destroyed after the retracement and re-survey of the Colo. Guide Meridian, and a new cor. established

Subdivision of T. 39 S.R. 22 E.

- Chains in lieu thereof, 15 lks. N. and 9 lks. W. of the old cor.
 See book C, page 7. April 30, 1912.
- May 8, 1912:
- West on true line bet. secs. 24 and 25. Over broken mountainous land, drains S. Desc. 40 ft. along NW. slope of ridge.
- 6.50 Base of desc. bears N. 70° E. and SW. Thence over canon bottom.
- 9.75 Left bank of Recapture Creek, course SW. Cottonwood trees in clumps along creek.
- 10.40 Right bank of Recapture Creek, 1 ft. deep. Asc. 100 ft.
- 21.00 Ridge bears NE. and SW. Desc. 100 ft.
- 36.00 Wash 20 lks. wide, drains S. Ascend 50 ft.
- 39.82 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the earth and stone for $\frac{1}{4}$ sec. cor. with brass cap marked
 $\frac{1}{4}$
 S 24
 S 25
 1912
- raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.. Continue ascent from cor. 100 ft.
- 79.64 The cor. of secs. 23, 24, 25 and 26.
- Land mountainous and broken. Soil stony and poor wash bad land, 4th rate. Full growth cottonwood trees scattered along the banks of Recapture Creek.

Apr. 30: At this cor. at apparent noon I set off $14^{\circ}50'N.$ on the decl. arc, and observe the sun on the meridian; the resulting lat. is $37^{\circ}24'$ which is correct. Thence N. $0^{\circ}01'W.$ bet. secs. 23 and 24.

Over broken mountainous surface.

Land drains W. Desc. 150 ft.

- 11.40 Wash 10 lks. W. course SW.
- Ascend 75 ft. over sandy SE. slope. Ascend.
- 34.00 Top of low ridge bearing NE. and SW. Descend 50 ft. over land sloping NW.
- 40.00 The point for the $\frac{1}{4}$ sec. cor. falls on steep slope of sandstone ledge, impracticable to set cor.
- 40.40 Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in mound of earth and stone (impossible to set in ground

Subdivision of T.39 S.R.22 E.

Chains.

account of the subsurface stone.) for a witness corner to the $\frac{1}{4}$ sec cor. with a brass cap marked

W C
S 23 | S 24
1912

raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of the Cor.

Continue descent from cor.

41.00 Head of wash dry. Asc. 150 ft. to

46.00 Low spur, projects W. desc. 50 ft.

55.50 Wash, dry, 5 lks. wide, csc. W. Asc. 200 ft. over rocky SW. slope.

75.00 Top of ascent, E & W. Thence along rocky W. slope.

80.00 Set an iron post 3 ft. long 2 ins. in dia., 24 ins. in md. of earth & stone (impossible to set in ground on account of bed rock near surface) for the corner of secs. I3, I4, 23 and 24. with a brass cap marked

T 39 S R 22 E.
S I4 | S I3
S 23 | S 24
1912

raise a mound of stone 2 ft. base; $1\frac{1}{2}$ ft. high, W. of the cor.

Land broken and mountainous.

Soil, thin surface wash, stony and 4th, rate. Scant grazing.

No timber.

April 30th, 1912.

May 8: at 10h. 26m. a.m. I set off $37^{\circ}25'$ on the lat. arc; $17^{\circ}08''$ N. on the dec. arc and determine a meridian with the solar at the corner of secs. I3, I4, 23 and 24.

Thence I run,

East on a random line bet. secs. I3 and 24.

40.00 Set temp $\frac{1}{4}$ sec. cor.

79.74 Intersect the E. line of the township, 10 lks. S. of the corner of secs. I3, I8, I9, and 24, described in Res. Col. G.M. Thence S. $89^{\circ}56'$ W. on true line bet. secs. I3 and 24.

Over open mtns. land, draining E. into Recapture Creek.

Gradual ascent over creek bottom land,

25.50 Begin steep ascent of E. slope of bench, Broken surface.

32.25 E edge of bench 250 ft. above cor. thence over rolling bench or mesa, brs. N & S. Gravely surface. draining N.

Subdivision of T.39 S.R22 E.

Chains.	An occasional scrub cedar or pinon.
39.87	Set an iron post, 3 ft. long 1 in. in dia., 24 ins. in earth & stone, for the $\frac{1}{4}$ sec.cor. with a brass cap marked $\begin{array}{r} \frac{1}{4} \\ S I3 \\ \hline S I4 \\ S I3 \\ \hline 1912 \end{array}$ raise a mound of earth & stone 2 ft. base 1 $\frac{1}{2}$ ft. high N. of the corner.
54.30	Dry wash, 10 lks. wide, 2 ft. deep, cse. N. Leaye cedars, brs. N. & S. Gradual ascent.
75.54	High sandstone ledge, perpendicular brs. NW & SE. From top of ledge, descend from mesa.
79.74	The corner of secs. I3, I4, 23 and 24. Land mountainous and broken and rolling. Soil, rolling mesa, short sagebrush, 2nd, rate, about 43.00 chs. balance wash canon side, adobe, 4th, rate. little vegetation. No timber, except occasional scrub cedar or pinon. At this cor. at 11h.56m.a.m. appt. I set off 17°09'30" N. on the dec.arc; and observe the sun on the meridian. The reading of the lat.arc is 37°25' showing my 1st.lat. to be about correct.
	May 8th, 1912.
	April 30; 1912. The sun being obscured by clouds, I continue my line from the south as a transit line bet. secs. I3 and I4. Thence I run N. 0° 1' W. bet. secs. I3 and I4. Over mountainous land draining W. along W. slope of high spur. Ascend gradually. I5.00 Top of spur. E. & W. Descend over rolling mesa, on N slope. 40.00 Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the earth and stone, for $\frac{1}{4}$ sec.cor, with a brass cap mkd. $\begin{array}{r} \frac{1}{4} S I4 | S I3 \\ \hline 1912 \end{array}$ from which, A scrub cedar, 7 ins. dia., S. 32°30' E. 130 lks. Marked, $\frac{1}{4}$ S I3 B T

Subdivision of T.39 S.R.22 E.

Chains.	A scrub cedar, 10 in. in dia. S. $13^{\circ}30'$ W. 120 lks. Marked, $\frac{1}{4}$ S I4 B.T.
57.00	Dry wash, 10 lks. wide, cse. SE. asc.
68.00	Top of spur, projects. E. desc.
78.00	Small wash, 5 lks. wide, SE. asc. gradually.
80.00	Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in earth and mound of stone (impossible to set post firmly in earth, account subsurface stone.) for the corner of secs. II, I2, I3 and I4 with a brass cap marked

T 39 S R 22 E
S II	S I2
S I4 | S I3

1912

Raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of the cor.
Land rolling.

Soil rocky and light sandy loose texture.

Short scat. sagebrush and greasewood.

Scant grazing. An occasional scrub cedar or pinon.

April 30, 1912.

May 10th, 1912, at the cor. of secs. II, I2, I3 and I4 I set off
 $17^{\circ}41'30''$ N. on the dec. arc, and at apparent noon, observe
the sun on the meridian. The resulting lat. is $37^{\circ}26'$.

Thence I run,

N. $89^{\circ}56'$ E. on a random line bet. secs. I2 and I3.

40.00 Set temp $\frac{1}{4}$ sec. corner.

79.64 Intersect the E. bdy of the township, I2 lks. N. of the
corner of secs. xxxx. 7, I2, I3 and I8, described in Res. Col. G.M.
Thence I run, N. $89^{\circ}59'$ W.

On true line bet. secs. I2 and I3.

Over open broken land, draining E. into Recapture Creek.

7.30 Left bank of Recapture Creek, 1 ft. deep Cse. South.

8.30 R. bank of same. Ascend steep E. slope.

24.30 Top of steep ascent, N & S. Grad, asc.

34.30 Top of ridge, N & S. desc. 150 ft.

Chains.	
39.82	Set an iron post 3 ft.long, 1 in.in diam. 24 ins.in a Md. of earth & stone,(impossible to set firmly in earth, sandstone rock near surface.) for the $\frac{1}{4}$ sec.cor. with a brass cap marked S I2 S I3 1912 raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of corner.
46.80	Canon wash,dry,20 lks.wide,Cse.C.asc.125 ft.to
59.30	Low ridge,brs.N & S.desc.
79.64	The corner of secs.II,I2,I3 and I4. Land broken and rolling. Soil gravely & stony. Vegetation,scant sagebrush & greasewood,Fair grazing in patches. No timber. At this corner at 1h/p.m. 1m.t. I set off $17^{\circ}42'$ N.on the dec.arc; $37^{\circ}26'$ on the lat.arc and determine a meridian with the solar,finding my lines to conform therewith.
	May 10th,1912.
	 May 4, 57m At 9h/a.m.l.m.t.. I set off $37^{\circ}26'$ On the lat.arc; $16^{\circ}01'$ N.on the dec.arc, and determine a meridian. Thence I run N. $6^{\circ}1'$ W.on line betsecs.II and I2. Over open rolling mesa,drawing E.Gradual ascent Over sandy surface,sage brush mesa. 25.00 Top of low ridge,brs.E & W.Desc.gradually. 40.00 Set an iron post 3 ft.long, 1 in.in dia., 24 ins.in earth for the $\frac{1}{4}$ sec.corner,with brass cap marked $\frac{1}{2}$ S II | S I2 1912 N.and S.of post dig pits 18 X 18 I2 ins. $3\frac{1}{2}$ ft.dist.raise a mound of earth $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft.high W.of the cor. 45.00 Draw.cse.E.Asc.gradually. 48.50 Low ridge,brs.E & W.Desc.grad.

Subdivision of T.39 S.R.22 E.

Chains. 58.25	Small canon wash, 25 lks. wide, cse. E. 5.00 chs. thence NE. Ascend gradually.
80.00	Low ridge, brs. N. 60° E. and W. Set an iron post 3 ft. long 2 ins. in dia., 24 ins. in earth & stone for the corner of secs. I, 2, II and I2. with a brass cap marked
	T 39 S | R 22 E S 2 | S I S II | S I2
	1912
	raise a mound of stone 2 ft. base, $\frac{1}{2}$ ft. high W. of corner. Land rolling.
	Soil sandy bench loam, 2nd, & 3rd, rate. No timber.
	Sage brush & salt sage, scant gth. Fair grazing. Bunch grass.
	At this corner at app. noon I set off $37^{\circ}27'$ on the lat. arc; $16^{\circ}02'$ N. on the dec. arc and observe the sun on the meridian. The instrumental lat. is therefore about correct.
	May 4th, 1912.
May 10, 1912 at 2 ^h / _{56m} p.m. 1.m.t.	I set off $37^{\circ}27'$ on the lat. arc; $17^{\circ}43'30''$ N. on the dec. arc, and determine a meridian. Thence I run
40.00	S. $89^{\circ}59'$ E. on a random line bet. secs. I and I2. Set temp. 1 sec. cor.
79.54	Intersect the E. bdy. of the township, 23 lks. N. of the corner of secs. I, 6, 7 and I2, described in Res. Vol. G.M. Thence, N. $89^{\circ}49'$ W. on true line, bet. secs. I and I2. Over broken land draining S.E. Desc.
14.25	Left bank of Recapture Creek, 40 lks. wide, 18 in. deep, course S. Ascend from R. bank, over broken bench slope.
22.50	On ridge, N. point of bench. N & S. Desc.
26.50	Bottom of dry gulch, cse. S. Ascend over a series of ledges 30 ft. high.
30.00	Top of ascent, brs. N & S. Desc.
33.50	An old cliff dwelling in fair preservation, N. 23° E. about 4.00 chs.
39.77	Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in a

Subdivision of T.39 S.R.22 E.

Chains.

mound of earth & stone,(bed rock too near surface to set proper depth in earth,)for the $\frac{1}{4}$ sec.cor.with a brass cap marked

$\frac{1}{4}$
S.I.
S.I2

1912

raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high N.of corner.

- 41.00 Bottom of dry canon.100 ft.below the mesa.Wash 30 ft.wide.course N.E.Ascend W.side of canon.
- 42.00 point of spur,projects S.from mesa to the North.Descend.
- 55.00 Enter same canon wash,cse,S.70°E.
- 64.50 Leave wash from S.asc.
- 79.54 The corner of secs.I,2,II and I2.
Land broken.
Soil,poor,4th,rate.Stony & Gravelly. No timber.
Little vegetation.

May 10, 1912.

May 11;The sky overcast,therefore solar observation in p.m.impossible.

I sight from my line bet.ses.II & I2 and project a line N.0°01'W.betsecs.I and 2.on random line.

- 40.00 Set temp $\frac{1}{4}$ sec.corner.
- 80.43 Intersect the N.bdy of the township,21 lks.E.of the corner of secs.I,2,35 and 36, heretofore described.
Thence S.0°10'E.on true line,bet.secs.I and 2.
Over broken descent from high point on mesa break,150 ft.
- 10.00 Base of steep descent E.& W.Thence over rolling mesa.
- 25.00 Wash,dry,15 lks.wide,shallow.cse.S.70°E.grad.asc.
- 30.00 Low spur,projects E.Desc.grad.
- 32.50 Old wagon road,brs.N.60°E & S 60°W.
- 40.43 Set an iron post 3 ft.long,1 in.in dia.,24 ins.in mound of stone,on solid bed rock,for the $\frac{1}{4}$ sec.cor.with a brass cap,marked

$\frac{1}{4}$ S 2 | S I

1912

Subdivision of T.39 S.R.22 E.

Chains.	raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.
40.75	Shallow wash, dry, 15 lks. wide, Cse. N.E. Thence gradual asc. over broken lava stone surface, draining E.
62.00	Wagon road bet. Bluff and Cortez. Colorado. brs, N. 70° E. and S. 70° W.
80.45	The corner of secs. I, II and III. Land rolling about 70.00 chs. Broken bench slope 10.00 chs. Soil, thin, sandy bench, gravelly & broken lava stone. Bare and little vegetation. Fair grazing in the vicinity. No timber.
	May 11th, 1912.

^{57m}
May 1st, 1912 at Sh/a.m.l.m.t. I set off $37^{\circ}22'30''$ on the lat.arc; $15^{\circ}07'N$. on the dec.arc and determine a meridian at the corner of secs. 2, 3, 34 and 35 on the S.bdy of the Township, heretofore described.

Thence I run, N. $0^{\circ}1'W$. bet. secs. 34 and 35.

Over open surface of washes and sharp canon side, bad lanes, bed rock & huge boulders. Steep descent from cor.

5.00	Canon wash, dry, 75 lks. wide. cse. S. $20^{\circ}E$. Asc. 50 ft.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in earth and stone, for $\frac{1}{4}$ sec.cor. with a brass cap marked,
	S 34 | S 35 I912

and raise a mound of earth & stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of the corner.

59.00	Low sandy ridge, brs. NE & SW. Desc. 50 ft.
75.00	Wash, dry, 15 lks. wide, cse. E. Asc. 75 ft. over rocky S. slope.
80.00	Set an iron post 3 ft. long 2 ins. in dia., 24 ins. in Md. of earth & stone, (solid sandstone too near surface to sink post firmly in ground) for the corner of secs. 26, 27, 34 and 35. with a brass cap, marked,

T 39 S. R 22 E	
S 27	S 26
S 34	S 35
I912	

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of corner. Land mountainous, and broken.

Subdivision of T.39 S.R.22 E.

Chains.

Soil bad lands and drift sand.poor 4th.rate.

Scant gth.of sage brush & greasewood, No timber.

Grazing poor.

Thence S. $89^{\circ}40' E.$

On a random line bet.secs.26 and 35.

40.00 Set temp $\frac{1}{4}$ sec.cor.

80.08 Intersect the N.and S.line,40 lks.S.of the cor.of secs.
25,26,35 and 36.

Thence,N. $89^{\circ}57' W.$

On true line bet.secs.26 and 35.

Over open mtns.land,draining S.Desc.50 ft.to

5.00 Base of descent,N & S.Thence across canon bottom land.

9.00 Dry wash,50 lks wide,cse.S.asc.

10.00 Ledge rim,20 ft.high,perpendicular.Thence grad.asc.

29.75 Top of low ridge.Desc.gradually.

40.04 Set an iron post 3 ft.long,1 in.in dia.,24 ins.in earth
and stone for the $\frac{1}{4}$ sec.cor.with brass cap marked

$\frac{1}{4}$
S 26
—
S 35
1912

raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high,N.of cor.

Continue descent from $\frac{1}{4}$ cor. 75 ft.to

46.75 Canon wash,dry,30 lks across wash,cse.S.Ascend steep
sandy N.E.slope,75 ft.to

56.00 Ridge of drift sand,NE & SW.desc.

72.50 Same wash.20 lks.wide.cse.N. $70^{\circ}E.$ asc.steep rocky slope
75 ft.

80.08 The corner of secs.26,27,34 and 35.

Land mountainous,

Soil,rocky and ridges of drift sand.poor 4th.rate.

Little vegetation;poor grazing. No timber.

May 1:

At this point at app.noon I set off $15^{\circ}09' N.$ on the dec.
arc and observe the sun on the meridian.The reading of
the lat.arc,is $37^{\circ}23'30''$ which is correct nearly.

Subdivision of T.39 S.R.22 E.

Chains.

Thence I run

N.0°I'W.bet.secs,26 and 27.

Over mountainous and sandy bad lands.draining E.Asc.grad.

3.00 Ridge E & W.Desc.100 ft.

20.00 Wash,I5 lks,wide,Cse.E.Asc.50 ft.

23.75 Ridge,brs.NW & E.Dec.50 ft.

27.00 Wash,dry,10lks.wide.cse.SE.Asc.

37.00 Ridge E. & W. desc.

40.00 Set an iron post 3 ft long,1 in.in dia.,24 ins.in earth
and stone,for the $\frac{1}{4}$ sec.cor.with a brass cap marked

$\frac{1}{4}$ S 27 | S 26

1912

raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of cor.

46.50 Wash,dry,10 lks.wide,cse.E.Asc.

50.50 Low sandy ridge brs,E & W.desc.

63.25 Wash,10 lks.W.Cse.E.Asc.

67.00 Low ridge,brs.E & W.Desc.

70.25 Wash,I5 lks.wide,Cse.S.E.Asc.50 ft.

80.00 Ridge,brs.NW & SE.

Set an iron post 3 ft.long 2 in.in dia.,24 ins.in earth
and stone for the corner of secs.22,23,26 and 27.with
a brass cap marked

T 39 S R 22 E

S 22 | S 23

$\frac{1}{4}$ S 27 | S 26

1912

raise a mound of stone 2 ft.base $1\frac{1}{2}$ ft.high W.of the cor.

Land mtns.bad lands.Wash surface & drift sand.

Soil sandy & stony poor 4th,rate. No timber.
May 1:

At this corner at 2h $\frac{57}{60}$ m.1.m.t.I set off 37°24' on the
lat.arc,15°II'N.on the dec.arc and determine a meridian.
with the solar.

Thence I run

S.89°57'E.on a random line bet.secs.23 and 26.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

80.12 Intersect the N. & S.line,3 lks.S.of the corner of secs.
23,24,25 and 26.

Thence I run,N.89°58'W.on true line bet.secs.23 and 26.

Over mountainous land,draining S.Desc.175 ft.on rocky
slope.

Subdivision of T.39 S.R.22 E.

Chains.
30.00 Wash, dry, 70 lks. wide, cse. S. asc. 30 ft. to
40.06 Spur, projects S. Set an iron post 3 ft. long 1 in. in dia.,
24 ins. in earth & stone, for the $\frac{1}{4}$ sec. cor. with a brass
cap marked.

$\frac{1}{4}$
S | 23
S | 26
I912

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.
50.00 Wash, dry, 20 lks. wide, Cse. SE. Asc. 150 ft. over broken land.
80.12 The corner of secs. 22, 23, 26 and 27.
Land mountainous, and broken.
Soil, poor. Rocky and drift sand. No timber.
Scant vegetation. Small scat. sagebrush and greasewood.
Scant grazing.

Thence N. 0° I' W. bet secs. 22 and 23.

Over broken and mountainous land, draining E.

18.00 Wash, dry, 15 lks. wide, cse. E. Asc. 50 ft.
28.00 Spur from W. proj. E. Desc. 50 ft.
33.00 Wash, dry, cse. E. Asc.
40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in earth &
stone for the $\frac{1}{4}$ sec. cor. with a brass cap marked

$\frac{1}{4}$ S 22 | S 23
I912

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.
42.50 Top of ridge, E & W. Desc.
62.50 Wash, dry 30 lks. wide, cse. E. Asc. steep rocky ledges.
80.00 Set an iron post 3 ft. long 2 ins. in dia., 24 ins. in earth
and stone, for the corner of secs. I4, I5, 22 and 23. with
a brass cap marked

T 39 S	R 22 E
S 15	S 14
S 22	S 23

I912

raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.
Land mountainous and broken.
Soil, rocky and sandy. 4th, rate.
Scant vegetation and poor grazing. May 1st, 1912.
No timber.

Subdivision of T.39 S., R.22 E.

Chains.	May 8, 1912.
40.00	From the cor.of secs.14,15,22 and 23, I run S.89°58' E.on a random line betsecs.14 and 23, Set temp. $\frac{1}{4}$ sec.cor.
80.06	Intersect the N. & S.line at the corner of secs.13,14,23, and 24. Thence I run N.89°58' W.on a true line betsecs.14 and 23, Over mountainous, broken surface; descending abrupt W. slope of mesa, 200 ft..
7.50	Base of abrupt descent, bearing N. & S. Thence gradual de- scent, over sandy surface.
29.00	Canon wash, dry., 1 ch.wide, 5 ft.deep, course S. Ascend gradually.
40.03	Set an iron post, 3 ft.long, 1 in.in dia., 24 ins.in mound of earth and stone, for the $\frac{1}{4}$ sec.cor., with brass cap marked
	$\frac{1}{4}$ <u>S 14</u> <u>S 23</u> 1912
64.00	raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high N.of cor. Leave sandy soil; begin abrupt ascent, over rocky surface, bearing N. and S.
69.50	Foot of sandstone ledge, 30 ft.perpendicular height.
71.00	Point of ridge, on mesa, bearing N.and S.4 chs.; thence NW. Descend over broken surface.
73.50	Edge of sandstone ledge, 30 ft.high, bearing S.30° E. and west.
80.06	The corner of secs.14,15,22, and 23, 75 ft.below point of ridge. Land, mcountainous and broken. Soil, rocky and drift sand; loose and poor; 4th rate. Short scattering growth of sagebrush and greasewood. No timber. Little vegetation; poor grazing.

Subdivision of T.39 S., R.22 E.

Chains.	Ascending steep rocky slope.
2.00	Ledge rim, 30 ft. high, bears E. and W.
6.50	Ridge, bears N.60° W. and S.70° E. Descend gradually.
10.50	Edge of sandstone ledge, 40 ft. high, bearing NW. and S. 60° E. Descend abruptly 90 ft.
15.00	Base of abrupt descent, bearing NW. and SE. Descend gradually.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec.cor., with brass cap marked $\frac{1}{4} S 15 | S 14$ 1912 dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
45.00	Wash, dry, 5 lks. wide, 5 ft. deep, course NE. Ascend.
56.50	Low ridge, projecting E. Descend.
61.00	Wash, dry, 5 lks. wide, course E. Ascend.
67.40	Low rocky spur, projecting E. Descend.
74.00	Wash, dry, 70 lks. wide, 6 ft. deep, course S.60° E. Ascend gradually.
80.00	Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in mound of earth and stone, for the cor. of secs. 10, 11, 14 and 15, marked $T 39 S R 22 E$ $S 10 | S 11$ $\hline S 15 | S 14$ 1912 dig pits 18 x 18 x 12 ins. in each sec. $5\frac{1}{2}$ ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high W. of cor. Land, mountainous and hilly in canon. Soil, rocky and loose drift sand, poor; 4th rate. Grazing generally poor, but some good patches, scattered. No timber.
40.00	S.89°58'E. on a random line bet. secs. 11 and 14, Set temp. $\frac{1}{4}$ sec.cor.
80.00	Intersect N. and S. line 7 lks. S. of the cor. of secs. 11, 12, 13, and 14. Thence S.89°59'W. on true line bet. secs. 11 and 14, Over rolling mesa, draining E. Ascend gradually over

Subdivision of T.39 S., R.22 E.

Chains.	gravelly surface.
37.75	Low ridge, bearing N. and S. Descend gradually.
40.00	Set an iron post 3 ft long, 1 in. in dia., 24 ins. in earth and stone, for $\frac{1}{4}$ sec.cor., with brass cap marked
	$\frac{1}{4}$ <u>S 11</u> <u>S 14</u> 1912
	raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
53.25	Sandstone rim, 30 ft. high, bearing N. & NW. and S. Descend abruptly.
64.00	Wash, dry, 10 lks. wide, 5 ft. deep, coarse SW. Thence along base of steep S. slope.
80.00	The cor. of secs. 10, 11, 14, and 15. Land, rolling and mountainous. Soil, gravelly and rocky, poor; 4th rate in canon. Thin and 3d rate on mesa. No timber. Fair grazing in patches on mesa.

May 8: At 4h 27m p.m.l.m.t., I set off $37^{\circ} 26'$ on the lat.
arc; $17^{\circ} 13'$ N. on the decl.arc; and determine a meridian
with the solar at the cor. of secs. 10, 11, 14, and 15. Thence
 $N.0^{\circ} 41'$ W. bet. secs. 10 and 11,

Ascend abrupt rocky S. slope of bench, over wash canon
side and large sandstone boulders.

4.25 Base of ledge bearing NW. and E.; a sandstone perpendicular wall, 60 ft. high.

6.00 Top of ledge, 200 ft. above sec.cor. ledge bears NW. and E.
Thence over rolling mesa, through sagebrush.

10.00 Top of low ridge, bearing E. and NW.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the
ground, for $\frac{1}{4}$ sec.cor. with brass cap marked

$\frac{1}{4}$ S 10 | S 11
1912

dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist.;
and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.

60.00 Wash, dry, 10 lks. wide, 3 ft. deep, coarse E.

72.35 Wagon road, between Bluff, Utah and Cortez, Colorado,

Subdivision of T.39 S., R.22 E.

Chains.

bears N.60° E. and S.60° W.

- 80.00 Set an iron post 3 ft.long, 2 ins.in dia., 24 ins.in earth and stone, for the cor.of secs.2,3,10 and 11, marked on brass cap.

T:39 S	R 22 E
S 3	S 2
S 10	S 11
1912	

and raise a mound of stone 3 ft.base, $1\frac{1}{2}$ ft.high W.of Land, broken and rolling.

Soil, gravelly and rocky; 2d to 4th rate.

Some fair grazing in patches on mesa. No timber.

May 8, 1912.

- May 10, 1912: From the cor.of secs.2,3,10 and 11, I run N.89°59'E.on a random line betsecs.2 and 11,
- 40.00 Set temp. $\frac{1}{4}$ sec.cor.
- 79.96 Intersect the N.and S.line at the cor.of secs.1,2,11 & 10. Thence S.89°59'W.on true line betsecs.2 and 11, Over rolling mesa.
- 39.98 Set an iron poet 3 ft.long, 1 in.in dia., 24 ins.in the ground, for $\frac{1}{4}$ sec.cor.with brass cap marked
- | |
|-------------------|
| $\frac{1}{4}$ S 2 |
| S 11 |
| 1912 |
- raise a mound of stone 3 ft.base, $1\frac{1}{2}$ ft.high N.of cor.
- 47.60 Wagon road,between Bluff, Utah, and Cortez,Colorado,bear NE. and SW.
- 79.96 The cor.of secs.2,3,10, and 11. Land, rolling bench. Soil, gravelly and sandy; sagebrush bench. Fair grazing in patches. No timber.

May 10, 1912.

May 11: At 3h 0m p.m.l.m.t., I set off $37^{\circ}27'$ on the lat arc; $17^{\circ} 59'N$.on the decl.arc; and determine a meridian with the solar at the cor.of secs.2,3,10 and 11. Thence I run

N.0° 01W.on a random line betsecs.2 and 3,

Subdivision of T.39 S., R.22 E.

Chains.	
40.00	Set temp. $\frac{1}{4}$ sec.cor.
80.04	Intersect the N.bdy.of the Tp. 47 lks.E.of the cor.of secs. 2,3,34, and 35, heretofore described. Thence I run S.0°21'E.on true line betsecs.2 and 3,
	Descend abruptly, over rocky S.slcpe of high mesa.
5.50	Base of steep descent, 75 ft.below sec.cor.
12.75	Wash, dry, 30 lks.wide, course SW.
18.25	Same wash, 30 lks.wide, course E.
25.25	Same wash,30 lks.wide, course SW.
	Spring on the Bluff-Grayson stage road about 30 chs.E.
28.75	Same wash, 30 lks.wide, course SE.
40.04	Set an iron post 3 ft.long, 1 in.in dia., 24 ins.in earth and stone, for $\frac{1}{4}$ sec.cor., with brass cap marked $\frac{1}{4} S 3 | S 2$ 1912
	raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of cor.
50.25	Wash, 20 lks.wide, course E.; dry.
64.75	Telephone line, between Bluff and Grayson, bears NE. & SW.
65.25	Wagon road, between Bluff and Grayson, bears NE. and SW.
80.04	The cor.of secs.2,3,10, and 11.
	Land, open and rolling and broken.
	Soil, gravelly and rocky.
	Fair grazing of bunch grass in patches. Other vegetation sparse . No timber.
	May 11, 1912.

May 3: At 8h 27m a.m.l.m.t., I set off $37^{\circ}22'30''$ on the lat.arc; $15^{\circ} 34'N$.on the decl.arc; and determine a meridian with the solar at the cor.of secs.3,4,33, and 34 on the S.bdy.of the Tp.,heretofore.described.Thence I run N.0° 2'W.betsecs.33 and 34,
Over broken mountainous land; draining SW.Desc.gradually.
11.00 Wash, dry, 20 lks.wide, course SW.Ascend 200 ft.over stony surface.
28.00 High,sandy ridge, bearing N.70° E.and S.70° W. Descend 150 ft.over sandy NW.slope.

Subdivision of T.39 S., R.22 E.

Chains. 38.25	Wash, 15 lks.wide, dry, course N.70° E. Ascend.
40.00	Set an iron post 3 ft.long, 1 in.in dia., 24 ins.in mound of earth and stone, for $\frac{1}{4}$ sec.cor., with brass cap mkd. $\frac{1}{4}$ S 33 | S 34 1912 raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high W.of cor. Impossible to set post in ground, on account of bed rock.
44.75	Top of sandy ridge, bearing N.60° E. and W. Descend.
50.50	Wash, dry., 10 lks.wide, course E. Ascend.
54.00	Sandy spur, projects SE. Ascend.
55.75	Wash, 10 lks.wide, course SE. Ascend 75 ft.over rocky land, sloping south.
64.25	Sandy spur, projects SE. Descend.
66.25	Wash, dry, 10 lks.wide, course SE. Ascend 75 ft.to
80.00	Set an iron post 3 ft.long, 2 ins.in dia., 24 ins.in ground; for cor.of secs.27,28,33, and 34,with brass cap marked
	T 39 S R 22 E S 28 | S 27 S 33 | S 34 1912 raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of cor. Land, mountainous and broken. Soil, stony and sand drifts, poor, 2d to 4th rate. Scant vegetation; scattering greasewood, short growth. Scant grazing. No timber.

40.00	S:89° 53'E.on a random line bet.secs.27 and 34, Set temp. $\frac{1}{4}$ sec.cor.
80.05	Intersect N.and S.line 28 lks.S.of the cor.of secs.26,27, .34 and 35. Thence I run S.89°56'W.on true line bet.secs.27 and 34, Over mountainous land;gradually ascending along SE.slope .of ridge.
7.00	Spur, projects S. Descend.
16.25	Wash, 10 lks.wide, dry, course SW. Ascend 75 ft.
40.02½	Set an iron post 3 ft.long, 1 in.in dia., 24 ins.in the ground, for $\frac{1}{4}$ sec.cor.with brass cap marked
	$\frac{1}{4}$ S 27 S 34 1912

Subdivision of T.39 S.R.22 E.

- Chains raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
- 42.00 Spur, projects SW. desc.
- 47.50 Wash, dry, 20 lks. wide, cse, SE. asc.
- 50.00 Sandy spur, projects N. desc.
- 59.50 Wash, dry, 20 lks wide at bend from NW. to NE. asc.
- 68.50 Ledge, rim, brs., N. 60° E. & S.
- 76.00 Top of ascent, brs. N & S. 150 ft. above wash. thence across rolling bench.
- 80.05 The corner of secs. 27, 28, 33 and 34.
Land mountainous and bad lands.
Soil, poor. 4th, rate.
- Vegetation, scant. Short growth sagebrush and greasewood.
May 2:
At this cor. I set off $37^{\circ}23'30''$ on lat. arc; $15^{\circ}26'N.$ on decl. arc; and at apparent noon observe the sun on the meridian, which shows the instrumental lat. to be correct.
-
- N. $0^{\circ}2'$ W. bet secs. 27 and 28.
Over mountainous land, draining SW.
Asc. 50 ft. over huge boulders.
- 4.00 Ledge of sandstone, SW. & NE.
- 15.00 Ridge, brs., NE & W. desc. gradually; over stony and drift sand surface, 75 ft. to
- 40.00 Set an iron post, 3 ft. long, 1 in in dia., 24 ins. in a mound of earth, (impossible to set post in the ground, on account of underlying rock so near surface.) for the $\frac{1}{2}$ sec. cor. with a brass cap marked
- | | | |
|--------------------|--|------|
| $\frac{1}{2}$ S 28 | | S 27 |
|--------------------|--|------|
- 1912
- raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.
- 46.60 Sandstone rim rock or ledge, 10 ft. high, brs. NW & SE.
- 60.75 Descend 150 ft. over steep rocky surface, draining E.
- Wash, 15 lks wide, cse. E. asc. 175 ft. over stony S. slope.
- 79.00 Ledge rim of sandstone, 15 ft. high, brs., NE, & W.
- 80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in earth and stone for the corner of secs. 21, 22, 27 and 28 with a brass cap marked

Subdivision of T.39 S.R.22 E.

Chains.

T 39 S	R 22 E
S 21	S 22
S 28	S 27

1912

raise a mound of stone 2 ft. base, $\frac{1}{2}$ ft. high W. of the cor.
 Land, mountainous and broken
 Soil, rocky & sandy. poor 4th. rate.
 Scant vegetation, or grazing. No timber.

- N. $89^{\circ}56'$ E. on a random line bet. secs. 22 and 27
 40.00 Set temp $\frac{1}{4}$ sec. cor.
 79.99 Intersect the N & S line, 4 lks. S. of the corner of secs.
 22, 23, 26 and 27.
 Thence I run
 S. $89^{\circ}54'$ W. on true line bet. secs. 22 and 27.
 Over mountainous bad lands draining SE. Through scat. cedar
 Descend 75 ft. to
 20.90 Wash, dry, cse. S. 60° E. 20 lks. wide. asc.
 39.99 $\frac{1}{2}$ Low ridge, brs. NW & SE. Set an iron post, 3 ft. long 1 in. in
 dia., 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor. with a brass
 cap, marked

S 22
S 27

 1912
 raise a mound of stone 2 ft. base, $\frac{1}{2}$ ft. high N. of the cor.
 63.00 Wash, 15 lks. wide, cse. SE. asc. over loose sandy surface.
 72.00 Begin steep rocky ascent.
 77.40 Sandstone ledge, at E. side of ridge. 15 ft. high. brs. N. 30° E
 and SW. From top of ledge, across rolling mesa.
 79.99 The corner of secs. 21, 22, 27 and 28.
 Land mountainous and broken.
 Soil, rocky and sandy. 4th, rate.
 Little vegetation. Scant grazing. An occasional scrub cedar
 or pinon.

Subdivision of T.39 S.R.22 E.

Chains.

May 2nd, at 2^h^{57m} p.m. I set off $37^{\circ}24'$ on the lat.arc; $15^{\circ}29'$ N. on the dec.arc and determine a meridian at the corner of secs. 21, 22, 27 and 28.

Thence N. $0^{\circ}02'$ W. bet. secs. 21 and 22.

Over mountainous land, draining E. Through scattered cedar and pinon. grad. asc.

9.00 Ridge, brs. E & W. Desc. 150 ft. to

37.50 Head of dry gulch, cse, NE. asc.

40.00 Set an iron post 3 ft. long 1 in. in dia., 24 ins. in earth and stone, for the $\frac{1}{4}$ sec.cor, with a brass cap marked

$\frac{1}{4}$ S 21 | S 22

1912

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.

43.50 Wash, dry, 10 lks. wide, cse. E. asc.

47.75 Top of ridge, brs. E & W. desc.

49.50 Wash, dry, 10 lks. wide, cse. N. 70° E. asc.

54.50 Top of low ridge, brs. N. 70° E. & S. 70° W. desc. 50 ft.

56.50 Wash, 6 lks. wide, dry, cse. E. asc.

72.50 Top of ridge, brs. E & W. desc. 50 ft.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in a mound of stone, on solid bed rock, for the cor. of secs.

15, 16, 21 and 22 with a brass cap marked

T 39 S R 22 E
S 16 | S 15
S 21 | S 22

1912

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.

Land, mountainous and broken.

Soil, poor, desert bad land and rocky, and loose drift sand, 3rd, & 4th, rate.

Scant vegetation, sagebrush and greasewood. Poor grazing.

Scattering cedar and pinon. May, 2nd, 1912.

May, 8th, At 7^h^{57m} a.m. I set off $37^{\circ}25'$ on the lat. arc; $17^{\circ}07'$ N. on the dec.arc, and determine a meridian with the solar at the corner of secs. 15, 16, 21 and 22.

Subdivision of T.39 S.R.22 E.

Chains.	Thence, N. $89^{\circ}54' E.$
	On a random line, bet. secs. I5 and 22.
40.00	Set temp $\frac{1}{4}$ sec.cor.
79.90	Intersect the N & S.line, 21 lks.N. of the cor.of secs.I4, I5, 22, and 23. Thence I run N. $89^{\circ}57' W.$ on true line betsecs.I5 and 22. Over open broken surface,draining SE.along S.slope of steep bench side.
16.55	Point of spur from bench to the N.Spur projects S.desc. E.slope 50 ft.
27.55	Wash,dry,10 lks.wide,3 ft.deep,cse.SE.asc.
39.95	Set an iron post 3 ft.long,I in.in dia., $\frac{1}{4}$ ins.in a mound of stone on bed rock,for the $\frac{1}{4}$ sec.cor.with a brass cap,marked
	<u>S. I5</u> <u>S. 22</u> 1912
	raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high,N.of the cor.
48.75	Point of spur,projects SW.Desc 75 ft.
65.65	Wash,dry,20 lks.wide,2 ft.deep,cse.cse.SE.
79.90	The cor.of secs.I5,I6,21 and 22. Land broken & mountainous. Soil, stony.Poor 4th,rate.Scant vegetation. No timber.
	May 8th, 1912.

May 6th, At 1^h, p.m.l.m.t. I set off $37^{\circ}25'$ on the lat.arc;
^{57m}
 $16^{\circ}38' N.$ on the dec.arc.and determine a meridian with the
solar,at the cor.of secs.I5,I6,21 qnd 22.

Thence I run

N. $0^{\circ}02' W.$ bet.secs.I5 and I6.

Over rolling surface draining.S.E.grad.desc.

2.00 Wash,15 lks.wide,cse.S. $70^{\circ} E.$ asc.

8.50 Spur,proj.S.E.desc.

14.50 Wash,dry,15 lks.wide,cse.NE.asc.

27.00 Low ridge,brs.NE and W.desc.

33.75 Wash,15 lks.wide,dry,cse.N. $70^{\circ} E.$ Thence SE.asc.grad.

40.00 Set an iron post 3 ft.long,I in.in dia., $\frac{1}{4}$ ins.in ground

Subdivision of T.39 S.R.22 E.

Chains.

for the $\frac{1}{2}$. sec.cor with a brass cap marked $\frac{1}{4}$ S I6 | S I5

1912

raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W of corner.Continue ascent from $\frac{1}{4}$ cor.over rolling surface, loose drift sand and exposed bed rock.

49.75 Stage and wagon road,bet.Bluff and Grayson.on summit of ridge,divide bet.Recapture and Cottonwood creeks.
Desc.gradually from ridge.

55.30 Grayson Bluff Telephone line.NE & SW.

76.40 Wash,dry,10 lks.wide,cse.S 70° E.

80.00 Set an iron post 3 ft.long,2 ins.in dia.,24 ins.in ground for the cor.of secs.9,I0,I5, and I6.with brass cap mkd.

T 39 S R 22 E /

S 9 | S I0

S I6 | S I5

1912

dig pits $18 \times 18 \times 12$ ins.in each sec.5 $\frac{1}{2}$ dist.raise a mound of earth 4 ft.base, $2\frac{1}{2}$ ft.high W of the corner.

Land rolling.Soil,stony, and drift sand.2nd,to 4th,rate.

Fair grazing on N. $\frac{1}{2}$ No timber. May,6th,1912.

May 10:At 8 $\frac{1}{2}$ a.m. 56m. I set off $37^{\circ}26'$ on the lat.arc;
 $17^{\circ}39'$ N.on the dec.arc and determine a meridian at the corner of secs.9,I0,I5. and I6.

Thence I run

 $S.89^{\circ}57'E$ on a random line betsecs.I0 and I5.40.00 Set a temp $\frac{1}{2}$ sec.cor.

79.96 Intersect the N & S.line,II lks.N.of the cor.of secs.I6, II,I4 and I5.

Thence,N. $89^{\circ}52'$ W.on true line betsecs.I0 and I5.

Over broken land draining SE.desc.grad.

5.60 Canon wash,dry,75 lks.wide,10 ft.deep.cse.SE.

17.50 Wash,40 lks.wide,10 ft.deepN. 60° E.asc.

26.30 Spur,projects S.desc.

31.80 Gulch,dry,cse,S.asc.

39.98 Set an iron post 3 ft.long,1 in.in dia.24 ins.in mound

Subdivision of T.39 S.R.22 E.

Chains. of stone and earth,(impossible to set post in earth, on account of underlying stone near the surface,)for the $\frac{1}{4}$ sec.cor.with a brass cap marked

$\frac{1}{4}$
S.10
S.15
1912

raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high N.of the cor.

Steep ascent from the corner, 75 ft.

46.30 Edge of mesa, brs. N. thence E. grad. asc. over rolling mesa.

66.60 Grayson-Bluff telephone line. N. 15° E. & S. 15° W.

67.50 Grayson-Bluff stage road. N. 20° E & S. 20° W.

79.96 The corner of secs. 9, 10, 15, and 16.

Land broken and rolling.

Soil, stony and sandy, poor 3rd, and 4th, rate.

Scant vegetation, poor grazing.

No timber.

May, 10 th, 1912.

56m
May 12 At 7h/a.m.l.m.t. I set off $37^{\circ}26'$ on the lat.arc:

$17^{\circ}54'$ N.on the dec.arc and determine a meridian with the solar at the corner of secs. 9, 10, 15 and 16.

Thence I run

N. $0^{\circ}02'$ W. bet secs. 9 and 10.

Over open rolling sagebrush mesa draining SE.

40.00 Set an iron post 3 ft.long, 1 in.in dia., 24 ins.in the ground, for the $\frac{1}{4}$ sec.cor.with brass cap marked

$\frac{1}{4}$ S 9 | S.10
1912

raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft:high W.of corner.

62.50 Wash,dry,5. lks.wide,cse.SE.

80.00 Set an iron post 3 ft.long, 2 ins.in dia., 24 ins.in the ground, for the corner of secs. 3.4,9 and 10 with a brass cap marked

T 39 S R 22 E
S.4 | S.3
S.9 | S.10

1912

raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of the cor.

Subdivision of T.39 S.R.22 E.

Chains.

Land rolling sagebrush mesa.

Soil, 1st and 2nd, rate if irrigated.

Fair grazing. No timber.

S.89°52' E.on random line bet.secs.3 and 10.

40.00 Set temp $\frac{1}{4}$ sec.cor.

80.10 Intersect the N & S line at the corner of secs.2.3.10 & II.
Thence I run

N.89°52' W.on true line bet secs.3 and 10.

Over rolling land draining SE.

2.30 Rocky knoll,N & S.desc.

7.55 Road,between Grayson and Bluff,brs,NE & SW.

12.30 Wash,dry,10 lks.wide,cse.NE.asc.broken land projecting
SE from mesa.

40.05 Set an iron post 3 ft.long, 1 in.in dia., 24 ins,in the
ground for the $\frac{1}{4}$ sec.cor.with brass cap marked.

$\frac{1}{4}$
S.3
S.10
1912

raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high N.of the cor.

41.75 Rocky ridge,brs.NW and SE. desc.

49.30 Wash,dry,20 lks.wide,cse.S.thence over rolling sagebrush
mesa.

80.10 The corner of secs.3,4,9 and 10.

Land rolling 31.00 chs.Broken,49.00 chs.

Soil,rocky & gravelly,1st,to 3rd,rate if irrigated.

Fair grazing.Short scat sagebrush. No timber.

At this corner at apparent noon,I set off $17^{\circ}56'$ on the
dec.arc;and observe the sun on the meridian.The lat.arc
reads, $37^{\circ}27'$.which is about correct.

May 11th,1912.

Subdivision of T.39 S.R.22 E.

Chains.	May 13: At 1h 30 m.p.m.l.m.t. I set off $37^{\circ}27'$ on the lat. arc; $18^{\circ}29'N$.on the dec.arc and determine a meridian with the solar at the corner of secs.3,4,9 and 10. Thence I run $N0^{\circ}02'W$.on random line betsecs.3 and 4.
40.00	Set temp. $\frac{1}{2}$ sec.cor.
79.83	Intersect the N.bdy. of the township 37 lks.E.of the cor. of secs.3,4,33 and 34, heretofore described. Thence $S.0^{\circ}18'E$.on true line betsecs.3 and 4. Through scrub cedar and pinon, on high ridge, E & W. S.edge of rim rock 40 ft high, over same, thence over mesa breaks, huge boulders and adobe washes. Leave timber.
2.70	9.75 Canon wash, dry, 175 ft below sec.cor.wash 30 lks wide, cse. $S.70^{\circ}W$.and ascend steep canon slope on south.
23.80	Base of 30 ft.sandstone ledge.
28.00	Top of ascent, 200 ft.above canon.Rim rock brs.NW &SE. thence grad.asc.over rolling mesa.
39.83	Set an iron post 3 ft.long, 1 in.in dia., in md.earth & stone on solid bed rock, for the $\frac{1}{2}$ sec.cor.with a brass cap marked
	$\frac{1}{2}$ S 4 | S 3 I912
	raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of the cor. I ch.E.of this cor.is a dry wash,draining from the SE. toward the NE.
75.20	Low ridge, brs,W.& SE.
79.83	The cor.of secs.3,4,9 and 10. Land mountainous, 28.00 chs.rolling, 52.00 chs. Soil, barren in canon.Fair on mesa.2nd,rate. Fair grazing on mesa.Scrub cedar and pinon, 2.70 chs.
	May 13th, I912.

Subdivision of T.39 S.R.22 E.

- Chains May 3: At 7h^{57m}/a.m.l.m.t I set off $37^{\circ}22'30''$ on the lat.arc; $15^{\circ}42'$ N. on the dec.arc and determine a meridian at the corner of secs. 4, 5, 32 and 33 on the S.bdy. of the township, heretofore described. Thence N. $0^{\circ}03'$ W. bet. secs. 32 and 33.
- Over rolling land.
- 10.00 Base of rocky spur, brs. E & W. asc.
- 17.00 Rocky spur, projects W. desc. 50 ft.
Note. From the 17.00 ch. point, the E. tip of Bears Ear, a point on Elk mountains about 25 miles dist., bears, N. $44^{\circ}35'$ W.
- 19.50 Small wash, 5 chs. wide, cse. W. asc. grad. over rolling surface.
- 33.00 Low ridge, brs. NE & west. desc.
- 40.00 Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor. with a brass cap marked

$$\frac{1}{4} \text{ S } 32 \mid \text{ S } 33$$

 1912
 raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of the cor.
 A cedar, 6 ins. in dia., S. 78° E. 123 lks. dist.
 Marked, $\frac{1}{4} \text{ S } 33 \text{ B T}$
- 42.50 Wash, 10 lks. wide, cse. S. 70° W.
- 53.00 Low ridge, brs. E. & W. desc; over rocky and sandy land draining NW.
- 80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for the cor. of secs. 28, 29, 32 and 33. with a brass cap marked,
 T. 39. S. R. 22 E

$$\underline{\text{S } 29 \text{ S } 28}$$

$$\text{S } 32 \mid \text{ S } 33$$

 1912
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.
 Land hilly, and rolling.
 Soil, loose drift sand and stony breaks.
 Fair grazing. No timber.

Subdivision of T.39 S.R.22 E.

- Chains. S. $89^{\circ}52' E.$ on a random line bet. secs. 28 and 33.
- 40.00 Set temp. $\frac{1}{4}$ sec.cor.
- 80.20 Intersect the N & S line $\frac{1}{4}$ lks.S. of the corner of secs. 27, 28, 33, and 34.
- Thence I run
N. $89^{\circ}58' W.$ on true line bet. secs. 28 and 33.
- Over mountainous open surface, draining S.asc.
- 5.00 Ledge rim, 20 ft. high, brs. N. $60^{\circ} E.$ & S. $60^{\circ} W.$
- 8.00 Ridge, 75 ft. above sec.cor., brs. NE & S. desc. gradually, 100 ft over bed rock, draining NW.
- 39.00 Wash, dry, 5 lks. wide, cse. North.
- 40.10 Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the ground, for the $\frac{1}{4}$ sec.cor. with brass cap marked
- | | |
|---------------|------|
| $\frac{1}{4}$ | S 28 |
| S | 33 |
| 1912 | |
- raise a mound of stone 2 ft. base, $\frac{1}{2}$ ft. high N. of the cor.
- Ascend from cor. over loose drift sand.
- 47.00 Short ridge, N & S. desc. 50 ft.
- 52.75 Wash, dry, 10 lks. wide cse. N. asc.
- 61.00 Ridge, brs. N & S. grad. desc.
- 80.20 The corner of secs. 28, 29, 32 and 33.
- Land rolling and broken.
- Soil, loose drift sand, and bare, 4th. rate.
- Poor grazing, scat. short sagebrush. No timber.
- May 3: h. m.
- At this corner at 9.57 a.m. l.m.t. I set off $37^{\circ}23'30''$ on the lat.arc, $15^{\circ}43' N.$ on the dec.arc and determine a meridian with the solar.
-
- N. $0^{\circ}03' W.$ bet. secs. 28 and 29.
- Over rolling mesa land draining W. Desc grad. 60 ft. sandy soil.
- 23.50 Wash, dry, 20 lks. wide. cse. W. asc.
- 37.25 Grayson-Bluff telephone line, brs. NE and SW.
- 40.00 Set an iron post 3 ft. long 1 in. in dia., 24 ins. in the

Subdivision of T.39 S., R.22 E.

Chains.

ground, for the $\frac{1}{4}$ sec.cor., with a brass cap marked

T 39 S 29 | R 22 E
S 28
1912

dig pits 18 x 18 x 12 ins. N. & S. of post 3 ft. dist.;
and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of
the cor.

Continue grad. asc. from the cor.

- 43.00 Top of low sandy ridge, brs. E. & W.; desc. grad.
46.75 Wash, dry, 30 lks. wide, cse. W. Asc.
51.00 Stage road bet. Bluff and Grayson, brs. NE. and SW.
67.00 Top of ridge N. 60° . E. & S. 60° W., 75 ft. above wash; desc.
60 ft.

- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in
the ground, for the corner of secs. 20, 21, 28, and 29,
with brass cap marked

T 39 S | R 22 E
S 20 | S 21
S 29 | S 28
1912

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the
cor.

Land, rolling.

Soil, sandy, loose texture, 2nd to 4th rate.

Scant grazing.

Scattered short sagebrush.

No timber.

May 3: At apparent noon I set off $15^{\circ} 45'$ N. on the decl.
arc, and observe the sun on the meridian at this cor.

The lat. arc reads $37^{\circ} 24'$, which is approximately cor-
rect.

Thence S $89^{\circ} 58'$ E. on random line bet. secs. 21 and 28

40.00 Set temp. + sec. cor.

80.15 Intersect the N. & S. line at the corner of secs. 21, 22, 27
and 28. Thence I run

N. $89^{\circ} 58'$ W. on true line bet. secs. 21 and 28,

Over rolling loose drift sandy land, and rocky washes, draining S.

Subdivision of T.39 S., R.22 E.

Chains.	through very scat. cedar & pinon. Grad. asc. from cor.
12.00	Top of sandy ridge, brs. NE. & SW. desc. grad. 80 ft.
36.00	Gulch, dry, cse. SW. Asc.
38.00	Spur, projects SW. Desc.
40.07	Set an iron post 3 ft. long, 1 in. dia., 24 ins. in mound of stone and earth, on solid rock, for the $\frac{1}{4}$ sec.cor., with brass cap marked
	$\frac{1}{4}$ <u>S. 21</u> S 28 1912
	A scrub cedar, .12 ins. in dia., brs. S. $12^{\circ} 30' W$.- 171 lks. dist., marked $\frac{1}{4}$ S 28 B.T
	A scrub cedar, 14 ins. in dia., brs. N. $81^{\circ} E. 48$ lks. dist., marked $\frac{1}{4}$ S 21 B.T
	Leave scat. timber and continue grad. desc. 75 ft.
49.50	Wash, dry, 30 lks. wide, cse. S. $35^{\circ} W$. Asc.
63.00	Tel. line, bet. Bluff and Grayson, cse. N. $30^{\circ} E.$ & SW.
65.00	Ridge NE. and SW.
66.75	Stage road bet. Bluff and Grayson, brs. NE. and SW. desc.
80.15	The corner of secs. 20, 21, 28, and 29.
	Land, hilly and rolling.
	Soil, loose drift sand, and broken stony texture, 4th rate.
	Scattered cedar and pinon about 40.00 chs.
	May 3: At 2h 27m p.m. l.m.t., I set off $37^{\circ} 24'$ on the lat. arc; $15^{\circ} 46' N.$ on the decl. arc; and determine a meridian with the solar at this corner.
	N. $0^{\circ} 03' W$. bet. secs. 20 and 21,
	Over. open. rolling and broken surface. Grad. desc. through greasewood.
11.50	Wash, 15 lks. wide, cse. W. Asc. 80 ft.
26.75	Ridge, brs. E. & SW.; grad. desc. 80 ft.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in ground for the $\frac{1}{4}$ sec.cor. with brass cap marked
	$\frac{1}{4}$ S 20 | S 21 1912
	raise a mound of stone 2ft. base, $1\frac{1}{2}$ ft. high W. of the cor.
53.50	Wash, dry, 20 lks. wide, cse. SW., 3 chs.; thence NW.

Subdivision of T.39 S.R.22 E.

- Chains. Asc.steep S.slope of drift sand ridge.
- 65.00 Top of ridge, shifting sand prs.NW and SE.desc.steep NE.
slope.
- 77.50 Bottom of slope, along bottom land.
- 80.00 100 ft.below ridge, Set an iron post 3 ft.long 2 ins.in dia.24 ins.in earth and stone, for the corner of secs.
I6,I7,20 and 21.with brass cap marked,

T 39 S. R 22 E
S I7 | S I6
S 20 | S 21

1912

raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high N.of the cor.
Land rolling and mountainous.

Soil, loose drift sand, and broken rocky slopes. 4th.rate.

An occasional scrub cedar or pinon.

Scant vegetation, short greasewood or sagebrush.

Scant grazing.

S.89°58'E.

On random line betsecs.I6 and 21.

40.00 Set temp $\frac{1}{4}$ sec.cor.

80.04 Intersect the N & S.line 4 lks.N.of the corner of secs.
I5,I6,21 and 22.

Thence, I run, N.89°56'W.on true line bet,secs, I6 and 21.

Over rolling sagebrush mesa land,draining SE.

26.50 Stage road bet.Bluff and Grayson.N.35°E and S.35°W.

29.00 Top of ridge,divide bet Cottonwood Creek and Recapture.Cr.
brs.NE and S.desc.grad.

30.00 Telephone line bet.Bluff and Grayson.N.35°E and S.35°W.

40.02 Set an iron post 3 ft.long,1 in.in dia.,24 ins.in the
ground for the $\frac{1}{4}$ sec.cor.with brass cap marked

S I6
S 21

1912

raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high N.of the cor.

Subdivision of T. 39 S.R. 22 E.

Chains. 47.75	Desc. abrupt SW.slope from mesa.
60.00	Canon wash,dry,250 ft.below mesa.cse.NW.I5 lks.wide.asc. 150 ft.
67.00	Top of drift sand ridge,NW and SE.
80.04	The cor.of secs.I6,I7,20 and 21. Land,mountainous and rolling.and broken. Soil,sand, on mesa and ridge.about 60 chs.balance broken canon sides an washes,2nd,to 4th.rate. Scant grazing,no timber.Scat.sagebrush on mesa.

May, 3rd, 1912:

57m	May, 6:At 8h/a.m.l.m.t.I set off $37^{\circ}25'$ On the lat.arc and $16^{\circ}35'$ N.on the dec.arc and determined a meridian at the corner of secs.I6,I7,20 and 21. Thence N. $0^{\circ}03'$ W.on line betsecs.I6 and I7. Over mountainous bad lands,draining W.
I.75	Canon wash,dry,20 lks.wide,cse.NW.asc.50 ft.
10.00	Spur,projects W.desc.75 ft.
22.50	Wash,dry,40 lks.wide,cse.SW.grad.asc.rocky S.slope.
30.00	Begin abrupt ascent over huge boulders,
40.00	200 ft.above wash.Set an iron post 3 ft.long 1 in.in dia. 24 ins.in earth and stone,for the $\frac{1}{4}$ sec.cor.with brass cap marked
	$\frac{1}{4}$ S I7 | S.I6 1912
	raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of the cor. Continue steep ascent from $\frac{1}{4}$ sec.cor.
53.00	Top of ascent 175 ft.above the $\frac{1}{4}$ cor.thence along top of rolling sagebrush mesa:thin stony soil.
80.00	Set an iron post 3 ft.long,2 ins.in dia.,24 ins.in the ground,for the corner of secs.8.9,I6 and I7,with brass cap marked
	T 39 S R 22 E S 8 | S 9 S I7 | S I6 1912
	raise a mound of stone 3 ft.base 2 ft.high W of the cor.

Subdivision of T. 39 S., R. 22 E.

Chains	Land, mountainous and broken 53.00 chs. Rolling mesa 27 chs.
	Soil, barren except on mesa, where there is fair to scant grazing. No timber.
	May 6.: At this point at apparent noon, I set off $16^{\circ}36'30''$ N. on the dec. arc. and observe the sun on the meridian, the resulting lat. is $37^{\circ}26'$ which is about correct lat.
	S. $89^{\circ}56' E.$ on random line bet. secs. 9 and 16.
40.00	Set temp. $\frac{1}{4}$ sec. corner.
79.92	Intersect the N & S line, 2 lks. N. of the corner of secs. 9, 10, 15 and 16. Thence I run N. $89^{\circ}55' W.$ on true line bet. secs. 9 and 16.
	Over rolling open mesa, draining SE. Grad. asc.
10:00	Draw, dry, cse. SE.
39.96	Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in ground for the $\frac{1}{4}$ sec. cor. with brass cap marked $\frac{1}{4}$ S 9 S 16 1912
	dig pits 18 x 18 x 12 ins. E & W of post, 3 ft. dist.; raise mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
55.00	Swale, drains NE.
79.92	The corner of secs. 8, 9, 16 and 17. Land rolling. Soil, gravelly and sandy loam, 1st rate if irrigated. Grazing fair. An occasional cedar or pinon. Short sage-brush.
	May 6th, 1912.
	May 9: I run N. $0^{\circ}03' W.$ bet. secs. 8 and 9.
	Over open broken and mountainous land, draining SW.
1.00	Begin steep descent from mesa. Desc. 100 ft.
24.00	Gulch, dry, cse. W. Asc. 75 ft.
37.00	Edge of mesa, NW & SE. Enter cedar & pinon. scat.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in earth and stone for the $\frac{1}{4}$ sec. cor. with brass cap marked $\frac{1}{4}$ S 8 | S 9 1912
	From which

Subdivision of T. 39 S., R. 22 E.

Chains	A scrub cedar, 8 ins. in dia., brs. S. 80° 30' E., 92 lks. dist., marked $\frac{1}{4}$ S 9 B T. A scrub cedar, 6 ins. in dia., brs. S. 89° W., 58 lks. dist., marked $\frac{1}{4}$ S 8 B T.
	May 9: At this cor. at 1h 56m p.m., l.m.t., I set off 37° 26' 30" on the lat. arc; 17° 28' N. on the dec. arc. and determine a meridian with the solar.
49.00	N. edge of mesa, brs. NE & SW. Desc. over steep N. slope.
56.00	Foot of steep descent, E & SW. Desc. grad.
67.00	Wash, 200 ft. below edge of mesa, 20 lks. wide, 4 ft. deep, cse. W.
80.00	Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in ground for the cor. of secs. 4, 5, 8 & 9 with brass cap marked
	T 39 S R 22 E S 5 | S 4 S 8 | S 9 1912
	raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Land, broken and mountainous. Soil, stony; 4th rate; scant vegetation. Scat. cedar & pinon on N. $\frac{1}{2}$ mile.
	S. 89° 55' E. on random line bet. secs. 4 and 9.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.02	Intersect the N & S line 7 lks. S. of the cor. of secs. 3, 4, 9 and 10. Thence I run N. 89° 58' W. on true line bet. secs. 4 and 9. Over open rolling mesa. Grad. asc.
40.01	Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in ground for the $\frac{1}{4}$ sec. cor. with brass cap marked $\frac{1}{4}$ S 4 S 9 1912 dig pits 18x18x12 ins. ^{E. and W. of post} 3 ft. dist., and raise a mound

Subdivision of T.39 S.R.22 E.

Chains.	of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high N. of the cor.
	This corner is situated on top of ridge brs. N. & SE. desc.
59.00	Edge of mesa, brs., NW. & SE. desc. steep W. slope.
65.50	Wash, dry, 100 ft. below mesa. 10 lks. wide, 5 ft. deep. cse. S. asc. 75 ft. to
75.00	Spur, projects SW. desc. 75 ft.
80.02	The cor. of secs. 4, 5, 8 and 9. Land broken & rolling. Soil, gravelly and rocky. Sagebrush mesa 59.00 chs. fair grazing on mesa. balance barren or scant vegetation. No timber.
	May 9, 1912.

May 13, 1912.

	From the corner of secs. 4, 5, 8 and 9 I run N.0°03'W. on a random line bet. secs. 4 and 5.
40.00	Set temp. 3 sec. cor.
79.73	Intersect the N. bdy. of the township 12 lks. E. of the cor. of secs. 4, 5, 32 & 33, heretofore described. Thence S.0°08'E. on the true line bet. secs. 4 and 5. Over broken mountainous land, draining W. desc. steep S. slope over sandstone ledges and boulders, 175 ft. to
7.75	Base of descent, bearing E. & W. thence across canon wash over broken surface.
13.20	Canon wash, dry, 1 ch. wide, 5 ft. deep, cse. W. asc. 75 ft.
39.73	Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in earth & stone, for 1 sec. cor. with brass cap marked S 5 | S 4 1912.
	raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of the cor. From cor. begin steep asc. N. side of bench and enter scat. cedars, E. & W.
52.50	N. rim, edge of mesa. 100 ft. above 1 cor. brs. E & W. grad. asc.
55.75	Top of mesa point brs. E & W. desc. grad.
59.25	Edge of mesa, brs. E & W. desc. steep S. slope 174 ft. to
72.20	Base of steep desc. Wash, 15 lks wide, cse. SW. Grad. asc.

Subdivision of T. 39 S. R. 22 E.

Chains. 79.73	<p>The corner of secs. 4, 5, 8, and 9. Land, broken and mountainous. Soil, rocky, and poor 4th, rate. Timber, scattering cedars. May 13, 1912.</p>
	<i>Daniel B. Miller.</i> U.S. Surveyor.
	<p>Note: For the establishment of Polaris meridian and test of solar apparatus, see page 1, Book "A", under date of April 26 and 27.</p>
	<p>May 3: At the cor. of secs. 5, 6, 31 and 32, Tps. 39 and 40 S., R. 22 E., I set off $37^{\circ} 22' 30''$ N. on the lat. arc, $15^{\circ} 42' 30''$ N. on the decl. arc, and at 7h 57m, a. m., l. m. t.; determine the meridian with the solar. Thence I run, from said sec.cor., as heretofore described. N. $0^{\circ} 03'$ W., bet. secs. 31 and 32.</p>
	<p>Over gently rolling land, covered with greasewood under-growth.</p>
30.00	Dry draw, 10 lks. wide, course S. 60° W.; asc. slightly.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor. with brass cap mkd.
	$\begin{array}{c|c} \frac{1}{4} & \\ \hline S & 31 | S & 32 \\ & \end{array}$ 1912
	<p>Dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.</p>
56.00	Top of asc., bears S. 60° W., N. 60° E.; desc.
69.00	Dry draw, drains S. 60° W.; asc.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 29, 30, 31 and 32; with brass cap mkd.
	$\begin{array}{c} T39S \\ R22E \\ \hline S & 30 | S & 29 \\ \hline S & 31 | S & 32 \\ & \end{array}$ 1912
	<p>Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Land, gently rolling.</p>
	<p>Soil, sandy; 3rd rate. No timber. Undergrowth greasewood.</p>

Subdivision of T.39 S., R.22 E.

Chains	S.89°57'E.on a random line bet.secs.29 and 32,
40.00	Set temp. $\frac{1}{4}$ sec.cor.
80.09	Intersect N.and S.line, 10 lks.N.of the cor.of secs.28, 29,32, and 33. Thence I run N.89°53'W.on a true line bet.secs.29 and 32, Over gently rolling land, covered with greasewood under- growth.
14.00	Telephone line, bears N.20°E.and S.20° W.
14.10	Grayson-Bluff stage road, bears N. and S.
40.04 ¹	Set an iron post 3 ft.long, 1 in.in diam., 24 ins.in the ground, for $\frac{1}{4}$ sec.cor.with brass cap marked <u>S 29</u> S 32 1912 raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high N.of cor. A small spring about 20 chs.N.; runs only in wet weather.
54.00	Dry draw, 20 lks.wide, course S.60° W. Ascend.
70.00	Top of ascent, bears NE. and SW. Descend.
80.09	The cor.of secs.29,30,31, and 32. Land, rolling. Soil, sandy; 3d rate. No timber. Undergrowth, greasewood.
40.00	N.89°54'W.on a random line bet.secs.30 and 31, Set temp. $\frac{1}{4}$ sec.cor.
79.42	Intersect W.bdy.of Tp. 9 lks.N.of the cor.of secs.25,30, 31 and 36, heretofore described. Thence I run S.89°58'E.on a true line bet.secs.30 and 31, Over rolling land, covered with greasewood undergrowth.
3.00	Ascent bears N.60° E. and S.60° W.
39.43	Set an iron post 3 ft.,long, 1 in.in dia., 24 ins.in the ground, for $\frac{1}{4}$ sec.cor., with brass cap marked <u>S 30</u> S 31 1912 dig pits 18 x 18 x 12 ins.E.and W.of post 3 ft.dist.;

Subdivision of T.39 S., R.22 E.

	Chains.	and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N.of cor.
79.42	The cor.of secs.29,30,31, and 32. Land, rolling. Soil, sandy; 3d rate. No timber. Undergrowth, greasewood.	
	May 3: At the cor.of secs.29,30,31 and 32, I set off $15^{\circ} 45' N.$ on the decl.arc; and at 11h 57m a.m.l.m.t., observe the sun on the meridian; the resulting lat.is $37^{\circ} 23' N.$ Thence I run N.0°03'W.betsecs.29 and 30, Over rolling land, covered with greasewood undergrowth.	
19.00	Point of ridge, projecting from the NE.;200 ft.high.	
24.00	Top of ridge, projecting from the NE. Desc.	
40.00	Set an iron post 3 ft.long, 1 in.in dia., in mound of stone and earth, on solid rock, for $\frac{1}{4}$ sec.cor., with brass cap marked	
	$\frac{1}{4}$ S 30 | S 29 1912	
	raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high W.of cor.	
44.00	Dry draw, 15 lks.wide, course W. Asc.gradually.	
80.00	Set an iron post, 3 ft.long, 3 ins.in dia., 24 ins.in the ground, for the cor.of secs.19,20,29, and 30, with brass cap marked	
	T 39 S | R 22 E S 19 | S 20 S 30 | S 29 1912	
	dig pits 18 x 18 x 12 ins.in each sec. $5\frac{1}{2}$ ft.dist.; and raise a mound of earth 4 ft.base,2 ft.high W.of cor.	
	Land, rolling.	
	Soil, sandy;3d rate. No timber. Undergrowth,greasewood.	
40.00	S.89°53'E.on a random line betsecs.20 and 29, Set temp. $\frac{1}{4}$ sec.cor.	
80.22	Intersect N.and S.line 2 lks.S.of the cor.of secs.30,31, 28 and 29.	

Subdivision of T. 39 S., R. 22 E.

Chains.

Thence I run

N. $89^{\circ} 54'$ W., on a true line bet. secs. 20 and 29.

Over rolling land, covered with greasewood undergrowth.

24.00 Dry draw, drains SW.; continue desc.

36.00 Dry draw, 10 lks. wide, course NW.; continue gradual desc.

40.11 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground, for the $\frac{1}{4}$ sec. cor.; with brass cap mkd.

S 20

S 29

1912

Dig pits, 18x18x12 ins. E. and W. of post, 3 ft. dist.;
and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high,
N. of cor.

80.22 The cor. of secs. 19, 20, 29 and 30.

Land, rolling.

Soil, sandy; 3rd rate. No timber. Undergrowth, greasewood.

N. $89^{\circ} 58'$ W., on a random line bet. secs. 19 and 30.

40.00 Set a temp. $\frac{1}{4}$ sec. cor.

79.41 Fall .2 lks. N. of the W.C. to the cor. of secs. 19, 24,
25 and 30 on the W. bdy. of the Twp., which is 3 lks.

W. of the true point; (witness cor. heretofore described).

Thence I run, from true cor. point,

S. $89^{\circ} 59'$ E., on a true line bet. secs. 19 and 30; desc.

over rolling land, covered with greasewood under-
growth.

39.00 Dry draw, 15 lks. wide, course N. 75° W.; asc. gradually.

39.38 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground, for the $\frac{1}{4}$ sec. cor.; with brass cap mkd.

S 19

S 30

1912

Dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist.;
and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high,
N. of cor.

79.38 The cor. of sec. 19, 20, 29 and 30.

Land, rolling.

Subdivision of T. 39 S., R. 22 E.

Chains.

Soil, sandy; 3rd rate. No timber.

Undergrowth, greasewood. May 3, 1912.

May 4: At 8h57m, a. m., l. m. t., I set off $16^{\circ} 66' 30''$

N. on the decl. arc, $37^{\circ} 24'$ N. on the flat. arc, and determine the meridian with the solar at the cor. of secs. 19, 20, 29 and 30.

Thence I run

N. $0^{\circ} 03'$ W., bet. secs. 19 and 20.

Desc. gradually over gently rolling land covered with greasewood undergrowth.

33.50 S. rim of canon, 100 ft. deep, course W.

36.00 N. rim of canon, bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in. in diam. 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor.; with brass cap mkd.

S 19	S 20
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1912

Raise mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

64.50 Dry draw, 1 ch. wide, course W.; asc.

77.00 Top of asc., bears E. and W.; desc.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 17, 18, 19 and 20;

with brass cap mkd.

T 39 S	
R 22E	
S 18	S 17

S 19	S 20

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land, rolling. No timber. Undergrowth, greasewood.

Soil sandy to 64 chs.; barren rock the remainder.

S. $89^{\circ} 54'$ E., on a random line bet. secs. 17 and 20.

40.00 Set a temp. $\frac{1}{4}$ sec. cor.

80.46 Intersect the N. and S. line 4 lks. N. of the cor. of secs. 16, 17, 20 and 21.

Thence I run

N. $89^{\circ} 52'$ W., on a true line bet. secs. 17 and 20.

Asc. over rolling land covered with greasewood undergrowth.

Subdivision of T. 39 S., R. 22 E.

- Chains.
- 10.00 Top of asc., bears NW. and SE.; desc.
- 17.00 Dry draw, 20 lks. wide, course NW.; continue over gently rolling land.
- 40.23 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor.; with brass cap mkd.
- S 17
- S 20
- 1912
- Dig pits, 18x18x12 ins. E. and W. of post, 3 ft. dist.; and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
- 80.46 The cor. of secs. 17, 18, 19 and 20.
- Land rolling. No timber. Undergrowth, greasewood.
- Soil in east $\frac{1}{2}$ rocky; in W. $\frac{1}{2}$ sandy; 3rd and 4th rates.
- May 4: At 11h 57m a. m., 1. m. t., I set off 16° 02' N. on the decl. arc, and at the cor. of secs. 17, 18, 19 and 20, I observe the sun on the meridian; the resulting lat. is 37° 25' N. N. 89° 59' W., on a random line bet. secs. 18 and 19.
- 40.00 Set a temp. $\frac{1}{4}$ sec. cor.
- 79.24 Intersect the W. bdy. of the Twp., at the cor. of secs. 13, 18, 19 and 24, heretofore described. Thence I run S. 89° 59' E., on a true line bet. secs. 18 and 19.
- Asc. over rolling land, covered with greasewood under-growth.
- 1200 Top of round adobe knob, 40 ft. above cor.; desc.
- 5.24 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground; for the witness to the $\frac{1}{4}$ sec. cor. (true point for the $\frac{1}{4}$ sec. cor. fails in low flat subject to overflow by Cottonwood Creek.) with brass cap mkd.
- S 18
- S 19
WC
- 1912
- Raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
- 6.70 Right bank of Cottonwood Creek, 50 ft. high., bears N. 20° E., and S. 20° W.
- 9.24 Point for $\frac{1}{4}$ sec. cor.; corner not set.

Subdivision of T. 39 S., R. 22 E.

Chains.	
41.00	Cottonwood Creek, 20 lks. wide, 2 ft. deep, water muddy, course S. 20° W.; asc.
43.00	Left bank of Cottonwood Creek, 75 ft. high, bears N. 20° E. and S. 20° W.
64.20	Start asc. over W. slope of ridge.
79.24	The cor. of secs. 17, 18, 19 and 20. Soil sandy and rocky; 3rd and 4th rates. Land rolling. No timber. Undergrowth, greasewood. May 4, 1912.

John C. Shanna

U. S. Surveyor.

56m-	May 9: At the cor. of secs. 17, 18, 19 and 20, at 8 $\frac{1}{2}$ a.m., 1. m. t., I set off $37^{\circ} 25'$ on the lat. arc; $17^{\circ} 23' 30''$ N. on the decl. arc and determine the meridian.
	Thence I rung the side of the sec. line, first off to N. $0^{\circ} 03'$ W., bet. secs. 17 and 18.
	Over rolling land draining W. into Cottonwood Creek; desc.
15.00	S. side of canon, drains W.; sharp desc.
18.00	Canon wash drains W.; 80 lks. wide.
20.00	N. side of canon, grad. asc.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor. with brass cap mkd.
	$\frac{1}{4}$ S 18 S 17
	1912
	Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. This cor. is on a spur, projecting W.; desc. grad.
48.00	Wash dry, cse. W.; asc. 75 ft.
64.50	Spur, projects W. desc. 50 ft.
80.00	Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in mound of stone and earth, (underlying stone too near the surface to set the post in the ground) for the corner of secs. 7, 8, 17 and 18, with brass cap mkd.

Subdivision of T. 39 S., R. 22 E.

Chains.

T	39	S	R	22	E
S	7	S	8		
S	18	S	17		

1912

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
Land hilly and broken.

Soil, poor rocky and barren.

Little vegetation or grazing. No timber.

Thence I run

S. 89° 52' E.

on a random line bet. secs. 8 and 17.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.30 Intersect the N. and S. line 16 lks. S. of the cor. of secs.
8, 9, 16 and 17.

Thence N. 89° 59' W. on a true line bet. secs. 8 and 17.
Over rolling mesa, descending gradually.

29.00 W. edge of mesa, steep desc. from same 175 ft.

40.15 Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in
earth and stone, for the $\frac{1}{4}$ sec. cor., with brass cap
mkd.

$\frac{1}{4}$

S 8

S 17

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

51.50 Wash, 10 lks. wide, 3 lks. deep, cse. NW., thence over
rolling land.

80.30 The cor. of secs. 7, 8, 17 and 18.

Land rolling and mountainous.

Soil, gravelly and stony, poor 4th rate.

Scant vegetation, scant grazing. No timber.

May 9:

At this cor.-at apparent noon I set off $17^{\circ} 25'$ N. on the
dec. arc and observe the sun on the meridian. I obtain
 $37^{\circ} 26'$ as the instrumental lat. which is approximately
correct. To test this I used the sextant to Polaris and got

Thence I run N. 89° 59' W. on random line, bet. secs. 7 and
18.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.18 Intersect the W. bdy. of the township 11 lks. N. of the true

Subdivision of T. 39 S., R. 22 E.

- Chains. point for the cor. of secs. 7, 12, 13 and 18, 10 lks. S. of the witness corner, heretofore described.
Thence I run N. $89^{\circ} 56' E.$
- On true line bet. secs. 7 and 18.
- Over broken sandy surface; desc. grad.
- 13.18 Wash, dry, 100 lks. wide, 25 ft. deep, cse. SE.; asc. grad. 50 ft.
- 39.18 Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
- $\frac{1}{4}$ ✓
S 7
S 18
- 1912
- Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. This cor. is on a ridge, bearing N. and S.; desc. Ledge, 40 ft. high, perpendicular, brs. N. and S.
- 40.50 Two well preserved cliff dwellings, brn. N. about 4.00chs.
- 44.00 Right bank of Cottonwood Creek, 15 ft. high, cse. S.
- 68.30 Cottonwood Creek, 1 ch. wide, $1\frac{1}{2}$ ft. deep, swift and muddy, cse. S.
- 72.40 Left bank of Cottonwood Creek, 20 ft. high, asc. 75 ft.
- 79.18 The cor. of secs. 7, 8, 17 and 18.
- Land broken.
- Soil, sandy and gravelly. Poor 4th rate.
- Little vegetation. Grazing poor. No timber.
- At this cor., at 2h p. m., 1. m. t. I set off $37^{\circ} 26'$ on the lat. arc; $17^{\circ} 27' N.$ on the decl. arc., and determine the meridian with the solar.
- Signed May 9th, 1912.
- Daniel B. Miller
- U. S. Surveyor.
- For observation on Polaris and test of instrument on the same, May 12, at the close of my subdivisional surveys see "Book E" surveys in T. 38 S., R. 22 E.

May 10: 7h 57m, a. m., 1. m. t., I set off $37^{\circ} 26' N.$ on the lat. arc, $17^{\circ} 39' N.$ on the decl. arc, and at

Subdivision of T. 39 S., R. 22 E.

Chains	the cor. of secs. 7, 8, 17 and 18, I determine the meridian with the solar. Thence I run N.0°03'W. bet. secs. 7 and 8. Desc. over rolling land covered with greasewood under-growth.
12.00	Left bank of Cottonwood Creek; rocky bluff 75 ft. high, bears E. and W.
12.25	Cottonwood Creek, 50 lks. wide, 2 ft. deep, swift and muddy, course W.
12.50	Right bank of Cottonwood Creek, 50 ft. high, bears E. and W.
16.00	Right bank of Cottonwood Creek, sand, 50 ft. high, bears NW. and SE.
16.50	Left bank of Cottonwood Creek, sand, 50 ft. high.
22.50	Left bank of Cottonwood Creek, bears E. and W. thence along creek bottom.
25.00	Right bank of Cottonwood Creek, sand bank 40 ft. high, bears E. and W.
40.00	Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{2}$ sec. cor. with brass cap mkd. S 7 | S 8 1912 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
41.50	Right bank of Cottonwood Creek, bears NW. and SE.
44.00	Left bank of Cottonwood Creek, bears NW. and SE.
66.00	Left bank of Cottonwood Creek, rocky bluff 30 ft. high bears NW. and SE.
68.00	Right bank of Cottonwood Creek, sandy bluff 60 ft. high, bears NW. and SE.
79.00	Right bank of Cottonwood Creek, sandy bluff 40 ft. high bears NE. and SW.
80.00	Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 5, 6, 7 and 8, with brass cap mkd.

T 39 S | R 22 E

S 6 | S 5

S 7 | S 8

1912

Subdivision of T. 39 S., R. 22 E.

Chains	raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Land, rolling. Soil, sandy; 3rd rate. Cottonwood trees along the banks of Cottonwood Creek.
40.00	S. $89^{\circ}59' E.$ on a random line bet. secs. 5 and 8. Set temp. $\frac{1}{4}$ sec. cor.
80.48	Intersect the N and S line .7 lks. S. of the cor. of secs. 4, 5, 8 and 9. Thence I run S. $89^{\circ}58' W.$ on a true line bet. secs. 5 and 8.
16.00	Desc. over rolling land, devoid of undergrowth.
24.00	Dry draw, 10 lks. wide, drains S.
28.00	Dry draw, 15 lks. wide, drains S.
40.24	Dry draw, drains S. Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec.cor. with brass cap mkd.
	$\frac{1}{4}$ <u>S 5</u>
	S 8 1912
	raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
48.00	Draw, drains S. Asc.
56.40	Top of asc. bears N. and S. Desc.
76.00	Left bank of Cottonwood Creek, 75 lks. wide, $1\frac{1}{2}$ ft. deep, course W.
80.00	Right bank of Cottonwood Creek.
80.48	The cor. of secs. 5, 6, 7 and 8. Land rolling. Soil, adobe and covered with volcanic rock. No timber.
	May 10: 11h 56m a.m., l.m.t., I set off $17^{\circ}41' N.$ on the decl. arc; and at the cor. of secs. 5, 6, 7 and 8, I observe the sun on the meridian, the resulting lat. is $37^{\circ}26'30'' N.$
	S. $89^{\circ}56' W.$ on a random line bet. secs. 6 and 7.

Subdivision of T. 39 S., R. 22E.

Chains.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.02 Intersect the W. bdy. of the Twp. 9 lks. S. of the cor. of secs. 1, 6, 7 and 12, heretofore described.
Thence I run
East, on a true line bet. secs. 6 and 7.
Desc. over rolling land, covered with greasewood and scrub cedar timber.
- 4.00 Enter scattering scrub cedar timber, bears N. and S.
- 9.00 Dry draw; drains NW.; 10 lks. wide.; asc.
- 15.00 Top of asc., bears NE. and SW.; desc. grad.
- 29.00 Bottom of desc., asc. grad.
- 30.00 Dry draw, 10 lks. wide, drains NE.
- 39.02 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 6

S 7

1912

- Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Leave scattering scrub cedar timber, bears N. and S.
- 48.00 Dry draw, 10 lks. wide, drains NE.; desc. gradually.
- 72.00 Dry draw, 20 lks. wide, drains SE.; continue desc.
- 74.00 Well preserved cliff dwellings, N. 1 ch.
- 79.02 The cor. of secs. 5, 6, 7, and 8.
Land, rolling. Undergrowth, greasewood.
Soil, adobe and covered with volcanic rock, W $\frac{1}{2}$; sandy in the E. $\frac{1}{2}$. 3rd and 4th rates. No timber.
N. $0^{\circ} 03'$ W., on a random line bet. secs. 5 and 6.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.90 Intersect the N. bdy. of the Twp. 9 lks. E. of the cor. of secs. 5, 6, 31 and 32, heretofore described.
Thence I run
S. $0^{\circ} 07'$ E., on a true line bet. secs. 5 and 6.
Desc. over gently rolling land covered with greasewood undergrowth.
- 39.90 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

Subdivision of T. 39 S., R. 22 E.

Chains.

S 6 | S 5

1912

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

42.00 Draw, drains E., asc. gradually.

62.00 Dry draw, 10 lks. wide, course E.

79.90 The cor. of secs. 5, 6, 7, and 8.

Land, rolling.

Soil, sandy, and stony; 3rd and 4th rates.

No timber. Undergrowth, greasewood. May 10, 1912.

U. S. Surveyor.

For certificate of assistants, see Book "V" of this Group.

For Oaths, of the U.S. Surveyors, see same book.

GENERAL DESCRIPTION.

This township is generally open and a large part either barren or nearly so.

The surface may be said to all be of a broken character, except a large mesa in the north-central part, which is rolling, sage brush bench land.

On this bench there is fair grazing. In the other parts of the township the grazing is scant, except an occasional small park.

Except on the bench referred to, which is several hundred feet above the rest of the township, the soil is either light drift sand, or broken adobe washes or sandstone spurs; and there is little vegetation of any kind.

The N.bdy runs along the spurs and breaks of the mesa next higher than the mesa referred to in the N.part of this township and along this line there is considerable scrub cedar and pinon. On the rest the trees are only occasional, and so scrubby they are fit only for fuel.

There is an occasional Cottonwood tree on Recapture Creek, and Cottonwood Creek.

These are the only streams in the township that furnish any considerable flow of water, except during freshets.

Both streams are high in spring and early summer, but go dry or nearly so in late summer and in the fall of the year.

There are two springs in the township, one in sec.2, which is the larger, the other in sec.29.

The latter is only a wet weather spring, and goes dry in early summer.

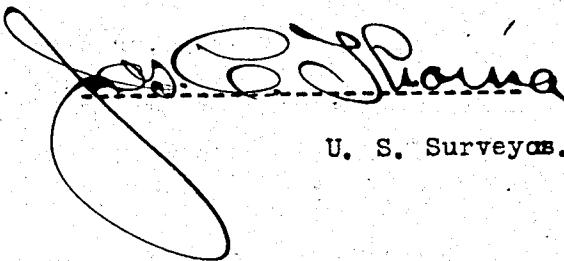
The former runs all the year round, in sufficient amount to supply stockmen camping there and teams passing between Bluff and Grayson, on which road the spring is situated.

Both springs are considerably alkaliied.

A telephone line between Bluff and Grayson, and the stage road between the same places, passes through township between the N.bdy.of sec.2 and the S.bdy.of sec.32. There are no settlers, in the township, and there was no evidence of the existence of coal or other minerals apparent.

Several prehistoric Cliff Dwellings, in fair to good state of preservation were seen along Récapture and Cottonwood Creeks.

Daniel B. Miller



U. S. Surveyor.

FINAL OATH OF UNITED STATES SURVEYOR.

I, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for bearing date of the day of 191 , I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of

For final oaths of U.S. Surveyors see book "V" T. 39 S., R. 26 E.

..... of the Meridian, in the State of which are represented the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said and sworn to before me }
this day of 191 }



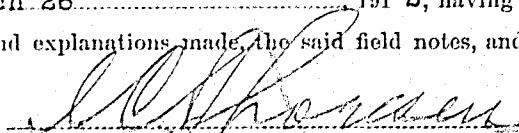
APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 2, 191

The foregoing field notes of the survey of the Subdivisional lines of Township No. 39 South, Range No. 22 East, of the Salt Lake Base and Meridian, Utah,

executed by Daniel B. Miller and Joseph C. Thoma
under special instructions dated March 26 191 2, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.


U. S. Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in has been correctly copied from the original notes on file in this office

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BOOK A-412

Filed Jul 1 1913

HEW

FIELD NOTES

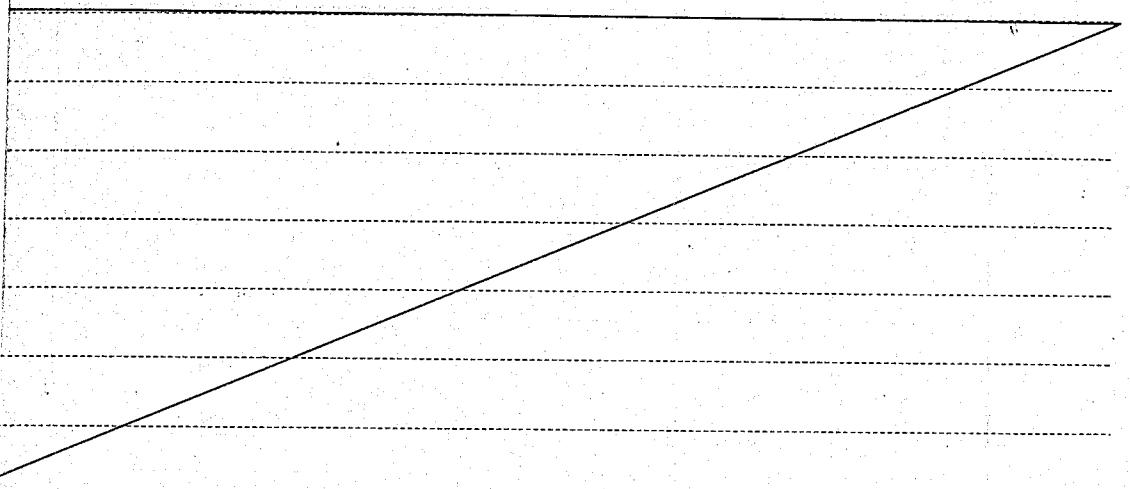
~~OF THE SURVEY OF THE~~

OF THE RETRACEMENT AND RESURVEY OF THE

COLORADO GUIDE MERIDIAN,

THROUGH TOWNSHIPS 38 and 39 SOUTH,

BETWEEN RANGES 22 and 23 EAST.



Of the Salt Lake Base and Meridian,

the State of UTAH.

EXECUTED BY

Jos. C. Thoma

the capacity of U. S. Surveyor, under instructions dated March 26, 1912,
ed by the United States Surveyor General to govern surveys included in
up No. 16, which were approved by the Commissioner of the General Land
ce, April 2, 1912, pursuant to authority contained in the Act of
gress dated , 1911.

Survey commenced May 6th, 1912

Survey completed May 9th, 1912

BOOK A-412

INDEX DIAGRAM.

Township _____, *Range* _____

6	5	4	3	2	1
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30	29	28	27	26	25
31	32	33	34	35	36

Retracement of the Colo. Guide Mer. through T. 39 S.

Chains. Note: For the establishment of a Polaris Meridian and

test of solar apparatus, see page 1, Book A, April 26 and 27, 1912.

May 6: At 8h 57m, a. m., l. m. t., I set off $37^{\circ} 23' 30''$ N. on the lat. arc; $16^{\circ} 34' 30''$ N. on the decl. arc, and at the cor. of Tps. 39 and 40 S., Rgs. 22 and 23 E., heretofore described, I determine the meridian with the solar.

Thence I run

North, on a random line, retracing the Colo. Guide Meridian, bet. secs. 31 and 36.

Difference bet. measurements of 40.00 chs., by two sets of chainmen, is 6 lks.; position of middle point or cor.

By 1st set, 40.06 chs.

By 2nd set, 40.00 chs.; the mean of which is

40.03 Fall 5 lks. E. of the $\frac{1}{4}$ sec. cor.; which is
A sand stone, 15x6x10 ins. above ground, firmly set; mkd.
 $\frac{1}{4}$ on the W. face. Mound of stone W. of cor.

Difference in measurement at the sec. cor. by two sets of chainmen, is 10 lks.

By the 1st set, 80.00 cha.

By the 2nd set, 79.90 chs.; the mean of which is

79.95 Fall 25 lks. E. of the cor. of secs. 25, 30, 31 and 36,
which is

A sandstone, 12x6x12 ins. above ground, firmly set; mkd.
with 5 notches on the N. and 1 notch on the S. edges.
Mound of stone W. of cor.

North on the same random line, bet. secs. 25 and 30.

Difference bet. measurements at the $\frac{1}{4}$ sec. cor., bet. two sets of chainmen is 8 lks.

By the 1st set, 40.01 chs.

By the 2nd set, 39.93 chs.; the mean of which is

39.97 Fall 3 lks. W. of the $\frac{1}{4}$ sec. cor., which is

A sandstone, 9x4x7 ins. above ground, firmly set; mkd.
 $\frac{1}{4}$ on the W. face. Mound of stone W. of cor.

Difference bet. measurements at the sec. cor., bet. two sets of chainmen is 20 lks.

Retracement of the Colo. Guide Meridian through T. 39 S.

	Chains.	By the 1st set, 80.00 chs.
79.90		By the 2nd set, 79.80 chs.; the mean of which is Fall 9 lks. W. of the cor. of secs. 19, 24, 25 and 30, which is A sand stone, 15x4x18 ins. above ground, firmly set in mound of stone; mkd. with 4 notches on the N., and 2 notches on the S. edges. No accessories.
39.83		May 6: At 11h 57m a. m., 1. m. t., I set off $16^{\circ}36' 30''$ N. on the decl. arc, and at the cor. of secs. 19, 24, 25 and 30, I observe the sun on the meridian, the resulting lat. is $37^{\circ}24' N.$ Continue North, on the same random line bet. secs. 19 and 24. Difference bet. measurements by two sets of chainmen, is 16 lks. By 1st set, 39.91 chs. By 2nd set, 39.75 chs.; the mean of which is Fall 27 lks. W. of the $\frac{1}{4}$ sec. cor.; which is A sandstone, 12x4x12 ins. above ground, firmly set; mkd. $\frac{1}{4}$ on the W. face. Mound of stone W. of cor. Difference bet. measurements by two sets of chainmen is 18 lks. By 1st set; 79.80 chs. By 2nd set, .79.62 chs.; the mean of which is Fall 38 lks. E. of the cor. of secs. 13, 18, 19 and 24, which is A sandstone, 15x6x18 ins. above ground, firmly set; mkd. with 3 notches on the N. and S. edges. No accessories.
40.03		Continue North, on random line, bet. secs. 13 and 18. Difference bet. measurements by two sets of chainmen is 8 lks. By the 1st set, 39.99 chs. By the 2nd set, 40.07 chs.; the mean of which is Fall 5 lks. E. of the $\frac{1}{4}$ sec. cor.; which is A sand stone, 12x3x10 ins. above ground, firmly set; mkd.

Retracement of the Colo. Guide Meridian through T.39 S.

Chains.	<p>$\frac{1}{4}$ on the W.face; witnessed by two bearing trees. Difference between measurements by two sets of chainmen is 12 lks. By 1st set 80.01 chs. By 2nd set 79.89 chs.; the mean of which is Fall 7 lks.W.of the cor.of secs.7,12,13, and 18, which is A sandstone 15 x 8 x 12 ins.above ground, firmly set, mkd. with 2 notches on the N.and 4 notches on the S.edges. Mound of stone W.of cor.</p>
79.95	<p>May 6, 1912.</p> <hr/> <p>May 7: At 8h 56m a.m.l.m.t., I set off $37^{\circ} 26' N.$ on the lat.arc; $16^{\circ} 51' N.$ on the decl.arc; and at the cor.of secs.7,12,13, and 18, determine the meridian with the solar. Thence I run North on the same random line bet.secs.7 and 12, Difference between measurements by two sets of chainmen is 4 lks. By the 1st set 40.09 chs. By the 2nd set, 40.05 chs.; the mean of which is Fall 22 lks.E.of the $\frac{1}{4}$ sec.cor., which is A sandstone 6 x 5 x 12 ins.above ground, firmly set, mkd. $\frac{1}{4}$ on the W.face. Mound of stone W.of cor. Difference between measurements by two sets of chainmen is 6 lks. By the 1st set 79.94 chs. By the 2nd set 79.88 chs.; the mean of which is Fall 24 lks.E.of the cor.of secs.1,6,7 and 12, which is A sandstone 15 x 8 x 12 ins.above ground, firmly set,mkd. with 1 notch on the N.and 5 notches on the S.edges. Mound of stone W.of cor.</p>
0.07	<p>Thence I run</p>
79.91	

Retracement of the Colo. Guide Meridian through T.39 S.

Chains.

North, on the same random line bet. secs. 1 and 6,

Difference between measurements by two sets of chainmen
is 10 lks.

By the 1st set 39.88 chs.

By the 2nd set, 39.98 chs.; the mean of which

39.93 Fall 36 lks.E.of the $\frac{1}{4}$ sec.cor., which is

A sandstone 10 x 10 x 12 ins. above ground, firmly set,
mkd. $\frac{1}{4}$ on the W.face. Mound of stone W.of cor.

Difference between measurements by two sets of chainmen
is 12 lks.

By the 1st set 79.85 chs.

By the 2nd set 79.97 chs.; the mean of which is

79.91 Fall 27 lks.E.of the cor.of Tps.38 and 39 S., Rs.22 and
23 E., heretofore described.

81.44 Fall 5.61 chs.W.of what I take to be the old Tp.cor.,
which is

A sandstone 20 x 6 x 15 ins. above ground, firmly set,
mkd. with 6 notches on the N.S.E. and W.edges. No accessories.

May 7: At 11h 56m a.m.l.m.t., I set off $16^{\circ} 53'$ N.on the
decl.arc; and at the cor.of Tps.38 and 39 S., Rs.22 and
23 E., observe the sun on the meridian; the resulting
lat. is $37^{\circ} 26' N.$

I destroy both of the above described township corners;
and at full six miles due north of the cor.of Tps.39
and 40 S., Rs.22 and 23 E., I establish the cor.of Tps.
38 and 39 S., Rs.22 and 23 E. as follows:

Set an iron post 3 ft.long, 3 ins.in diam., 24 ins.in the
ground, with brass cap mkd.

T 38 S	
R 22 E.	R 23 E.
S 36	S 31

S 1	S 6
T 39 S	
COLO G W	

1812

raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high S.of cor.

Resurvey of the Colo. Guide Meridian through T. 39 S.

Chains.

Thence I run
South, on true line bet. secs. 1 and 6.
Desc: gradually over gently rolling mesa, covered with
scattering greasewood undergrowth.

14.00 Draw, drains W.; asc. slightly.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec cor., with brass cap mkd.

$\frac{1}{4}$	
S 1	S 6
1912	

Destroy all evidence of old cor.

49.00 Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
Draw, drains W.

59.00 Cortez-Bluff wagon road, bears E. and W.

68.00 Canon, 200 ft. deep, 2 chs. wide, course W.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins.
in the ground, for the cor. of secs. 1, 6, 7, and 12,
with brass cap mkd.

T 39 S	
R 22 E	R 23 E
S 1	S 6
—	
S 12	S 7
COLO G M	

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
Destroy all evidence of old cor.
Soil, sandy; 2nd rate.
No timber. Undergrowth, greasewood.

South, on true line bet. secs. 7 and 12.

Asc. over rolling mesa, covered with sage brush under-
growth.

16.00 Top of asc., bears E. and W.; desc.

26.50 Edge of mesa, bears NW. and SE.; desc. over rough SW slope.

27.50 Spur of mesa, projects W.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	
S 12	S 17

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
Destroy all evidence of old cor.
Bottom of rough SW. slope of mesa. continue over level
bottom land.

54.00

Resurvey of the Colo. G. M., through T. 39 S.

chains.

- 66.00 Recapture Creek, 30 lks. wide, 2 ft. deep, course SE.
 69.00 Recapture Creek, course SW.; asc.
 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in
 the ground; for the cor. of secs. 7, 12, 13 and 18,
 with brass cap mkd.

T 39 S

R 22 E	R 23 E
S 13	S 7
S 13 S 18	
COLO G M	
1912	

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 Destroyed all traces of old cor.
 Land rolling and mountainous.
 No timber. Undergrowth sagebrush.
 Soil, sandy and stony 3rd and 4th rates.

- South, on a true line bet. secs. 13 and 18.
 Desc. gradually over nearly level bottom land, devoid of
 undergrowth.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
 the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	
S 13	S 18
1912	

- Raise a mound of stone, 3 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 Destroy all evidence of old cor.
 Recapture Creek, 10 lks. wide, 2 ft. deep, course SE.
 50.00 Start asc. over rolling mesa, bears NW. and SE.
 56.00 Dry draw, 10 lks. wide, drains E.
 70.00 Top of asc., bears E. and W.: desc.
 76.00 Draw, drains E.; asc.
 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins.
 in the ground, for the cor. of secs. 13, 18, 19 and 24,
 with brass cap mkd.

T 39 S

R 22 E	R 23 E
S 13	S 18
S 24 S 19	
COLO G M	
1912	

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 Destroy all evidences of the old cor.
 Land rolling.

Resurvey of the Colo. Guide Meridian through T. 39 S.

hains.

Soil, sandy and stony; 4th rate.

No timber.

Sage brush undergrowth; May 7, 1912.

May 8: AT 7h 56m, a. m., l. m. t., I set off $37^{\circ} 25'$ N. on the lat. arc, $17^{\circ} 07'$ N. on the decl. arc, and at the cor. of secs. 13, 18, 19 and 24, I determine the meridian with the solar.

Thence I run

South, on a true line bet. secs. 19 and 24.

Asc. over rolling land, covered with greasewood undergrowth.

7.00 Top of asc., bears E. and W.; desc.

3.00 Draw, drains E.; asc.

3.00 Top of asc., bears E. and W.; desc.

6.00 Dry draw, 10 lks., drains. E.; Asc.

0.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	
S 24	S 19

~ 1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

Destroy all evidence of the old cor.

0.00 Top of rolling asc., bears E. and W.; desc.

0.00 Recapture Creek, 2 chs. wide, 1 ft. deep, course W.; asc.

0.00 Set an iron post, 3 ft. long; 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 19, 24, 25 and 30, with brass cap mkd.

T 39 S	
R 22 E	R 23 E
S 24	S 19
S 25 | S 30	
COLO G M	
1912	

Notes 3/1/1951, shall dit en engt.
report this monument in poor
condition G.W.S.

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

Destroy all evidence of the old cor.

Land rolling.

Soil, sandy and stony; 4th rate.

No timber. Undergrowth, greasewood.

South, on a true line bet. secs. 25 and 30.

Asc. over rolling W. slope of mesa, covered with greasewood undergrowth.

Resurvey of the Colo. Guide Meridian through T. 39 S.

Chains.

- 14.00 Top of asc., bears E. and W.; desc.
 18.00 Dry draw, 10 lks. wide, drains W.; asc.
 16.00 Dry draw, 10 lks. wide, drains W.
 29.00 Top of asc., bears E. and W.; desc.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
 the ground, for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

1	
S 25	S 30

1912

Raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Destroy all evidence of the old cor.

- 51.00 Draw, drains W., asc.
 66.00 "ash drains SW.
 80.00 Set an iron post, 3 ft. long, 3 ins. in diam. 24 ins. in
 the ground for the cor. of secs. 25, 30, 31 and 36, with
 brass cap mkd.

T 39 S	
R 22 E	R 23 E
S 25	S 30
S 36	S 31
COLO G M	
1912	

Raise a mound of stone, 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

destroy all evidence of the old cor.

Land rolling.

Soil, sandy; 4th rate. No timber. Undergrowth greasewood.

South, on a true line bet. secs. 31 and 36.

Desc. over barren rocky slope of mesa.

- 21.00 Dry draw, 10 lks. wide, course W.; asc.
 23.00 Top of asc., bears E. and W.; desc.
 32.00 Dry draw, 10 lks. wide, course W.; asc.
 33.00 Top of asc., bears E. and W.; desc. gradually.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
 the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

1	
S 36	S 31

1912

Raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Destroy all evidence of old cor.

- 50.00 Bottom of desc., bears E. and W.; asc.

Note: 3/1/1887, Shell oil co. engt.
 report this cor. monument missing
 but did find few loose sandstone
 at location. G.M.J.

Retracement of the Colo. Guide Meridian through T. 38 S.

Chains	
53.00	Dry draw, 10 lks. wide, drains W.
60.00	Top of rolling mesa, bears NE. and SW. Desc.
80.00	The cor. of Tps. 39 and 40 S., Rgs. 22 and 23 E.
	Land roiling. Soil, rocky 4th rate. No timber.
	May 8: At this corner I set off $17^{\circ}08'30''$ N. on the decl. arc, and at 11h 56m a.m., l.m.t., observe the sun on the meridian, the resulting latitude is $37^{\circ}23'N$.
	May 8: At 1h 56m p.m., l.m.t., I set off $37^{\circ}23'N$. on the lat. arc, $17^{\circ}11'N$. on the decl. arc, and determine a meridian with the solar at the point for the old cor. of Tps. 38 and 39 S. Rgs. 22 and 23 E. which is 67 lks. S. and 27 lks. W. of the cor. of Tps. 38 and 39 S., Rgs. 22 and 23 E. as established by me and heretofore described. Thence I run
	North on a random line bet. secs. 31 and 36.
	Difference between measurements by two sets of chainmen is 14 lks., position of middle point
	By the 1st set, 40.06 chs.
	By the 2nd set, 39.92 chs., the mean of which is
39.93	Fall 46 lks. E. of the $\frac{1}{4}$ sec. cor., which is A sandstone 6x12x15 ins. above ground, firmly set, mkd. $\frac{1}{4}$ on W. face. No accessories.
	Difference between measurements of two sets of chainmen is 22 lks., position of middle point
	By the 1st set, 80.09 cha.
	By the 2nd set, 79.87 chs., the mean of which is
79.98	Fall 30 lks. E. of the cor. of secs. 25, 30, 31 and 36, which is A sandstone 8x6x6 ins. above ground, firmly set, mkd. with 5 notches on the N. and 1 notch on the S. edges. Mound of stone W. of cor.

Retracement of the Colo. Guide Meridian through T.38 S.

Chains	North on a random line bet. secs. 25 and 30. Difference between measurements by two sets of chainmen is 8 lks., position of middle point By 1st set, 40.10 chs. By 2nd set, 40.02 chs., the mean of which is
40.06	Fall 18 lks. E. of the $\frac{1}{4}$ sec. cor., which is A sandstone 8x4x10 ins. above ground, firmly set, mkd. $\frac{1}{4}$ on the W. face. Mound of stone W. of cor. Difference between measurements by two sets of chainmen is 14 lks., position of middle point By 1st set, 80.08 chs. By 2nd set, 79.94 chs., the mean of which is
80.01	Fall 1.01 chs. E. of the cor. of secs. 19, 24, 25 and 30, A sandstone 15x4x18 ins. above ground, firmly set, mkd. with 4 notches on the N. and 2 notches on the S. edges. Mound of stone W. of cor.
40.09	North on a random line bet. secs. 19 and 24. Difference between measurements by two sets of chainmen is 8 lks., position of middle point By 1st set, 40.13 chs. By 2nd set, 40.05 chs., the mean of which is
80.00	Fall 48 lks. E. of the $\frac{1}{4}$ sec. cor., which is A sandstone 12x4x12 ins. above ground, firmly set, $\frac{1}{4}$ on the W. face. Mound of stone W. of cor. Difference between measurements by two sets of chainmen is 18 lks., position of middle point By 1st set, 80.09 chs. By 2nd set, 79.91 chs., the mean of which is After diligent search I find no evidence of cor. North on a random line bet. secs. 13 and 18. Difference between measurements of two sets of chainmen is 6 lks., position of middle point By 1st set, 39.49 chs.

Retracement of the Colo. Guide Meridian, through T.38 S.

Chains.	By the 2d set 39.43 chs., the mean of which is
39.46	Fall 52 lks.E. of the $\frac{1}{4}$ sec.cor., which is a sandstone 15 x 3 x 6 ins.above ground, firmly set, mkd. $\frac{1}{4}$ on the W.face. Mound of stone W.of cor. One bearing tree, properly marked.
	Difference between measurements by two sets of chainmen is 18 lks.; position of middle point.
	By the 1st set 79.73 chs.
	By the 2d set 79.55 chs.; the mean of which is
79.64	Fall 19 lks.E. of the cor.of secs.7, 12, 13, and 18, which is a sandstone 15 x 8 x 15 ins.above ground, firmly set, mkd.with 4 notches on the S. and 3 notches on the N.faces. Mound of stone W.of cor. Also witnessed by two bearing trees.
	May 8, 1912.
	May 9: At 7h 56m a.m.l.m.t., I set off $37^{\circ} 31'$ N.on the lat.arc; $17^{\circ} 23'$ N.on the decl.arc; and at a point 19 lks.E. of the cor.of secs.7,12,13, and 18, I determine a meridian with the solar. Thence I run
	North on a random line bet:secs.7 and 12,
	Difference between measurements by two sets of chainmen is 10 lks.; position of middle point
	By the 1st set 40.04 chs.
	By the 2nd set 39.94 chs.; the mean of which is
39.99	Fall 9 lks.E. of the $\frac{1}{4}$ sec.cor., which is a sandstone 6 x 5 x 12 ins.above ground, firmly set, mkd. $\frac{1}{4}$ on the W.face; mound of stone W.of cor.
	Difference between measurements by two sets of chainmen is 18 lks.; position of middle point
	By the 1st set 80.27 chs.
	By the 2nd set 80.09 chs.; the mean of which is
80.18	Fall 5 lks.W.of the cor.of secs.1, 6, 7, and 12, which is a sandstone 18 x 3 x 12 ins.above ground, firmly set; mkd.with 1 notch on the N.and 5 notches on the S.

Retracement of the Colo. Guide Meridian through T.38 S.

Chains.

edges. Mound of stone W.of cor. Witnessed by two bearing trees; properly marked.

40.25

North on a random line bet.secs.1 and 6,

Difference in measurements by two sets of chainmen is 12 lks.; position of middle point.

By the 1st set 40.31 chs.

By the 2nd set 40.19 chs.; the mean of which is

Fall 60 lks.W.of the $\frac{1}{4}$ sec.cor., which is a cedar tree 12 ins.in diam., mkd. $\frac{1}{4}$ on W.side. Mound of stone W. of cor. Witnessed by one bearing tree; properly mkd. Difference between measurements by two sets of chainmen is 16 lks.; position of middle point

By the 1st set 80.53 chs.

By the 2nd set 80.36 chs.; the mean of which is

80.44

Fall 167 lks.W.of the cor.of Tps.37 and 38 S., Rgs.22 and 23 E., which is a sandstone 12 x 8 x 12 ins.above ground, firmly set, mkd.with 6 grooves , T 37 S on the N., 6 grooves T 38 S on the S., 6 grooves R 23 E on the E., and 6 grooves R 22 E on the W.faces. Mound of stone W.of cor.

This falling, 167 lks.minus 27 lks., offset to true corner>equals 140 lks., which divided by 6 gives $23\frac{1}{3}$ lks.per mile, which answers to the correction of 10' per mile. The total distance of the line is 479.58 chs.

Thence I run

S.O° 10'W. on a true line bet.secs.1 and 6,
Over nearly level mesa, covered with a dense growth
of sagebrush.

(25)

Resurvey of the Colo. Guide Meridian through T. 38 S.

Chains.

- 11.60 Enter dense cedar timber, bears NE. and SW.
- 39.58 I destroy all evidence of the old cor. and set an iron post, 3 ft long, 1 in. in diam., 24 ins in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
- | | | |
|---------------|-----|-----|
| $\frac{1}{4}$ | S 1 | S 6 |
|---------------|-----|-----|
- 1912
- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 79.58 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins in the ground, for the cor. of secs. 1, 6, 7 and 12, with brass cap mkd.
- | | |
|--------|--------|
| T 38 S | |
| R 23 E | R 23 E |
| S 1 | S 6 |
| S 12 | S 7 |
- COLO G M
1912
- Raise a mound of stone, 2 ft. base; $1\frac{1}{2}$ ft. high, W. of cor.
- I destroy all evidence of the old cor.
- Land, rolling.
- Timber, scrub cedar.
- Soil, sandy loam; 2nd rate.
- S. $0^{\circ} 10'$ W., on a true line bet. secs. 7 and 12.
- Desc. over mountainous land, covered with dense scrub cedar timber.
- 10.00 Canon, 50 ft. deep, course SW.; asc. over rocky W. slope.
- 20.00 Top of asc., bears E. and W.; desc.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
- | | | |
|---------------|------|-----|
| $\frac{1}{4}$ | S 12 | S 7 |
|---------------|------|-----|
- 1912.
- Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 56.00 Destroy all evidence of old cor.
- Draw, 30 lks. wide, course E., thence along bottom of same.
- 64.00 Start abrupt asc., bears E. and W.
- 70.00 Top of abrupt asc., bears E. and W.; desc.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in diam. 24 ins. in the ground for the cor. of secs. 7, 12, 13 and 18, with brass cap mkd.

Resurvey of the Colo. Guide Meridian through T. 38 S.

Chains.

T 38 S	
R 22 E	R 23 E
S 12	S 7
S 13	S 18
COLO G M	
	1912.

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 Destroy all evidence of old cor.
 Land mountainous, and covered with scattering scrub
 cedar timber.

Soil, adobe and stony; 4th rate.

May 9: At 11h 56m, a. m., l. m. t., I set off $17^{\circ} 25' 30''$

N. on the decl. arc, and at the cor. of secs. 7, 12, 13
 and 18, I observe the sun on the meridian, the result-
 ing lat. is $37^{\circ} 31' N.$

Thence I run

S. $0^{\circ} 10' W.$ on a true line bet. secs. 13 and 18.

Asc. over mountainous land, covered with scattering scrub
 cedar timber.

- 28.00 Old stage road from Bluff to Monticello, on dug-way,
 bears NW. and SE.
- 32.00 Top of mesa, 300 ft. above cor., bears NW and SE.
- 34.00 South, edge of mesa, bears E. and W.; desc. abruptly.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins in
 the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S 13	$\frac{1}{4}$	S 18
		1912

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

- 62.00 Leave scattering scrub cedar timber, bears E. and W.
- 65.00 Bottom of abrupt desc.; bears NE. and SW., continue over
 nearly level bottom land.
- 66.00 Dry draw, 20 lks. wide, course SW.
- 73.00 Dry draw, 30 lks. wide, course SE.
- 79.00 Draw, 30 lks. wide, course SW.
- 80.00 Set an iron post, 3 ft long, 3 ins. in diam., 24 ins. in
 the ground, for the cor. of secs. 13, 18, 19 and 24,
 with brass cap mkd.

Resurvey of the Colo. Guide Meridian through T.38 S.

Chains.

T 38 S	
R 22 E	R 23 E
S 13	S 18
S 24 S 19	
COLO G M	
1913	

raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 Land, mountainous; covered with scattering scrub cedar
 timber, 62.00 chs.
 Soil, adobe and stony; 4th rate.

S.0° 10' W. on true line bet. secs. 19 and 24,
 Desc. gradually over nearly level bottom land, covered
 with greasewood undergrowth.

- 5.00 Dry draw, 30 lks. wide, course SW.
 25.50 Recapture Creek, 30 lks. wide, 3 ft. deep, water muddy,
 course S.;
 Continue along creek bottom.
 34.50 Recapture Creek, 30 lks. wide, course SE.; asc.
 40.00 Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the
 ground, for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	
S 24	S 19
1913	

raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 I destroy all evidence of old cor.
 48.00 Top of low mesa, 50 ft. above creek, bears E. and W. Desc.
 56.00 Bottom of slope of mesa, bears NE. and SW.
 Continue along level creek flats.
 60.00 Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in
 the ground, for the cor. of secs. 19, 24, 25, and 30, with
 brass cap mkd.

T 38 S	
R 22 E	R 23 E
S 24	S 19
S 25 S 30	
COLO G M	
1912	

raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

Resurvey of the Colo. Guide Meridian through T.38 S.

Chains.

Destroy all evidence of old cor.

Land, gently rolling.

Soil, sandy, 3rd rate.

No timber. Undergrowth, greasewood.

S.0° 10'W.on true line bet.secs.25 and 30,
Asc.over nearly level creek bottom land, covered with
greasewood undergrowth.

4.00 Point of mesa, slopes E. Desc.

8.00 Foot of slope of point of mesa, bears NE. and SW.; thence
over nearly level bottom land.

30.50 Wire fence bears E. and W. Enter plowed land.

40.00 Set an iron post 3 ft.long, 1 in.in diam., 24 ins.in the
ground for the $\frac{1}{4}$ sec.cor.with brass cap mkd.

$\frac{1}{4}$
S 25 | S 30.
1913

raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of cor.

Destroy all evidence of old cor.

42.00 Leave plowed field, bears E. and W.;enter greasewood
undergrowth.

45.00 Recapture Creek, 30 lks.wide, 2 ft.deep, course SW.

60.00 Road, Bluff to Monticello, bears NE. and SW.

80.00 Set an iron post 3 ft.long, 3 ins.in diam. 24 ins.in the
ground, for cor.of secs.25,30,31, and 36,with brass cap
mkd.

T 38 S
R 22 E | R 23 E
S 25 | S 30
S 36 | S 31
COLO G M
1913

raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of cor.

Destroy all evidence of old cor.

Land level. Soil, sandy; 2d rate.

No timber. Undergrowth, greasewood.

S.0° 10'W.on true line bet.secs.31 and 36
Over level bottom land,covered with greasewood undergrowth
Leave bottom land,bears NE. and SW. Ascend over broken
E.slope of mesa, covered with scattering scrub cedar.

10.00 Dry draw, 10 lks.wide, course W.

23.00 Dry draw,15 lks.wide, course W.

29.00 Dry draw, 15 lks.wide, course W.

Resurvey of the Colo. Guide Meridian through T. 38 S.

Chains.

- 39.00 Top of asc., bears E. and W.; desc.
40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins.
in the ground, for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 36 | S 31 ✓

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

Destroy all evidence of the old cor.

- 72.00 Leave broken W. slope of mesa and scattering scrub cedar
timber, bears NW. and SE, continue over gently rolling
mesa land, covered with greasewood undergrowth.

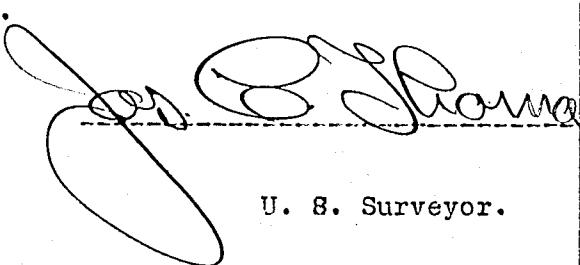
- 80.00 The cor. of Tps. 38 and 39 S., Rgs. 22 and 23 E., pre-
viously described.

Land mountainous.

Soil, adobe and stony; 4th rate. Timber, scrub cedar.

Undergrowth, greasewood. May 9, 1912.

Note: For general description, see notes on subdivision
of T. 38 S., R. 23 E.


U. S. Surveyor.

For Oath of the U.S. Surveyor, and certificate of assistants
see book "V" of this group.

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Page

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oath of U.S. Surveyor see book "V" T.39 S., R.26 E.

of the _____ Meridian, in the State of _____, which are represented by the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191_____ }



APPROVAL.

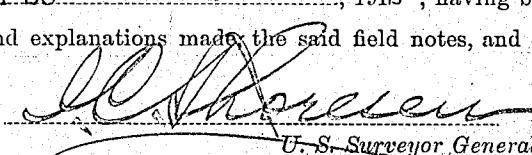
OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 2_____, 191_____
1912

The foregoing field notes of the _____ retrace and resurvey of the Colorado Guide Meridian through Townships 38 and 39 South, between Ranges 22 and 23 East of the Salt Lake Base and Meridian, Utah

executed by Joseph C. Thoma

under his special instructions dated March 26, 1912, having been critically examined, and the necessary corrections and explanations made to the said field notes, and the surveys they describe, are hereby approved.

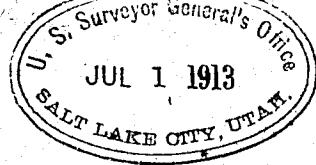

U. S. Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

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D.

H.E.W.

FIELD NOTES

OF THE SURVEY OF THE

WEST BOUNDARY

AND

RETRACEMENT OF PART OF THE NORTH BOUNDARY

O F

TOWNSHIP 38 SOUTH, RANGE 22 EAST

Of the SALT LAKE PARCE AND Meridian,
the State of U T A H

EXECUTED BY

DANIEL B. MILLER

the capacity of U. S. Surveyor, under instructions dated March 26, 1913,
ued by the United States Surveyor General to govern surveys included in
oup No. 16, which were approved by the Commissioner of the General Land
ice, April 2, 1912, pursuant to authority contained in the Act of
ngress dated , 1912.

Survey commenced May 14, 1912

Survey completed May 24, 1912

BOOK A-412

INDEX DIAGRAM.

Township Range

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Survey of the W. Boundary of T. 38 S., R. 22 E.

Survey commenced May 14, 1912, and executed with a Keuffel & Esser solar transit, No. 20037, with solar attachment. The horizontal limb is provided with two double verniers, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined by me and tested on the true meridian at Salt Lake City, January 22, 1912, and found correct.

At my camp in sec. 2, T. 39 S., R. 22 E., near the N. line, on May 12th, I examine the adjustments of the transit, and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during a.m. and p.m. hours, with a meridian determined by observations on Polaris, I proceed as follows:

At the camp as referred to above, in approximate lat. $N.37^{\circ}27'44''$; long. $109^{\circ}32'W.$, I set off $37^{\circ}27'30''$ on the lat. arc, and $18^{\circ}10'N.$ on the decl. arc, at 9h a.m., l.m.t., and determine a meridian with the solar, and mark a point in line therewith about 10 chs. N. of my station.

At apparent noon I set off $18^{\circ}11'30''N.$ on the decl. arc; and observe the sun on the meridian at the same station as above, and find the reading of the lat. arc is $37^{\circ}27'30''$.

At 3h p.m., l.m.t., at the same point I set off $37^{\circ}27'30''$ on the lat. arc, and $18^{\circ}13'30''N.$ on the decl. arc; and determine a meridian with the solar. I find the line of the meridian so determined falls on the point marked for the a.m. meridian.

May 12th, at the same station, at 7h 46m p.m., l.m.t., I observe Polaris, in accordance with the directions in the Manual, and mark the direction thus found, by

Survey of the W. Boundary of T. 38 S., R. 22 E.

sighting an object in line therewith on the horizon about a quarter of a mile to the N. of my station.

Upper culmination of Polaris May 12, l.m.t. 10h 07m a.m.

Or lower culmination of Polaris May 12 10 05 p.m.

Time of observation 7h 46m p.m., l.m.t. 7 46 "

Hour angle at time of obs. 2h 19m

Azimuth of Polaris at time of obs. $0^{\circ}51'$

May 13: At the same station I turn off $0^{\circ}51'$ to the E. from the object sighted last evening, in line with Polaris, and find the meridian thus determined agrees with the solar meridian secured yesterday.

At the same time, 8h a.m., l.m.t., I set off $37^{\circ}27' 30''$ on the lat. arc; $18^{\circ}26'00''$ N. on the decl. arc; and find the meridian thus determined agrees with my previous meridians. I therefore conclude that the solar attachments are in satisfactory adjustment.

During the progress of the surveys in T. 38 S., R. 22 E., I made tests at frequent intervals, of my instrumental parts, and kept my watch at all times set within one minute of local mean time.

For test of instrument, and solar attachments on Polaris meridian at the close of the survey of this township see book "A" survey of T. 39 S., R. 22 E. Polaris observation in sec. 29 T. 38 S., R. 23 E., May 24, 1912.

Survey of the W.bdy of township 38 S.R.22 E.

Chains.

May 14: 1912. At 10h.a.m.l.m.t. I set off $37^{\circ}27'30''$ on the lat.arc; $18^{\circ}40'$ N.on the dec.arc and determine a meridian with the solar at the cor.of townships 38 and 39 S.Rgs. 21 and 22 E.which was established by Jos.C.Thoma U.S. Surveyor Apr. 29, 1912 during the survey of the boundary lines of T.39 S.R.22 E.and described in his field notes of the survey of said township,in this group.
 Thence I run N.on a random line in accordance with the special instructions,setting temp. $\frac{1}{4}$ sec.and sec.corners at 40.00 and 80.00 chs.and at 480.50 chs.intersect the line bet.Tps.37 and 38 S.at a point 123 lks.W.of the established cor.of tps.37 and 38 S.Rgs.21 and 22 E.
 This falling answers to a bearing of S. $0^{\circ}09'$ W.for the line bet.ranges 21 and 22E in T.38 S.

May 15:At the old established corner of tps.37 and 38 S. Rgs.21 and 22 E.which is a sandstone 6 X 6 X 24 ins. above the ground firmly set, and marked and witnessed as described by the Surveyor General.

At 10h.a.m.l.m.t. I set off $37^{\circ}33'$ on the lat.arc, and $18^{\circ}54'$ N.on the dec.arc and determine a meridian.

Thence I run, S. $0^{\circ}09'$ W.on true line betsecs.1 and 6. Over broken surface through scrub cedar and pinon.Grad.asc.

4.50 Spur, projects E.Desc.100 ft.

12.25 Wash,dry,20 lks.wide,cse.E.asc.75 ft.

22.50 Ridge,brs.E&W.des.75 ft.

31.75 Wash,25 lks.wide,cse.SE.Leave scat,trees,brs.E&W.asc.

40.50 Set an iron post $\frac{3}{4}$ ft.long 1 in.in dia.,24 ins.in the earth and stone,for the $\frac{1}{4}$ sec.cor.with brass cap marked

$\frac{1}{4}$ S I | S 6

1912

raise a mound of stone 2 ft.base $1\frac{1}{2}$ ft.high W.of the cor.

Trees in vicinity too scrubby to mark.Continue asc.

61.50 Point of mesa, and spur,brs.SWprojects E.desc.175 ft.over SE slope.

W.Boundary of Township 58 S.R.22 E.

Chains.

76.50

Enter short sage brush brs.E&W..

80.50

Set an iron post 3 ft.long,3 ins.in dia.,24 ins.in the ground,for the corner of secs. I.6,7, and I2,with brass cap,marked.

T	38	S
R	21	E
S	I2	S 6
S	I2	S 7

1912

Raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft.high W.of cor. Land broken and in washes draining E.dry.

Soil,thin,stony and poor 4th,rate.

Scat.scrub cedar and pinon.Patches of sage brush.

Scant grazing.

S.0°09'W.on trueline betsecs.7 and I2.

Surface same.decs.

4.00 Canon wash,30 lks.wide,dry,cse.S.70°E.asc.

20.00 Leave short sagebrush,E&W.

24.00 Spur,point,proj.E.desc.

26.25 Gulch,cse.NE.dry,asc.

40.00 Set an iron post 3 ft.long,1 in.in dia.,24 ins.in a mound of stone and earth,(stone too near surface to set post firmly in earth,)for the $\frac{1}{2}$ sec.cor.with brass cap marked

$\frac{1}{2}$	S	I2	S 7
---------------	---	----	-----

1912

raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of the cor. Low ridge,brs,E & W.desc.Leave scat.scrub timber.Over open broken canon washes & ridges.

70.00 Sandstone boulder 40 X 20 X 20 ft.on line.

76.50 Wash,10 lks.wide,cse.SE.asc.

80.00 Set an iron post 3 ft.long,3 ins.in dia.,24 ins.in mound of stone,on baked hardpan and stone,impossible to dig hole for the post,for the corner of secs.7,I2,I3 and I8. with brass cap marked

T	38	S
R	21	E
S	I2	S 7
S	I3	S 18

1912

raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft.high W.of the cor.

Land broken.

Soil,rocky poor barren,4th,rate.

Scat.cedar & pinon.60.00 chs.scant grazing

W.bdy.of T.39 S.R.22 E.

Chains.	S.6°09'W.bet.secs.I3 and I8 on true line. Over broken rocky bad land surface.draining E.
10.00	Enter scat.cedar and pinon.brs.NW. and SE.
14.00	Wash,dry,I5 lks.wide,cse,S 20°W.
30.60	Same wash,csc.SE.asc.grad.
30.00	Low ridge,brs.E & W.desc.grad.
40.00	Set an iron post 3 ft.long,1 in.in dia.,24 ins.in earth & stone,for the sec.cor.with brass cap marked
	$\frac{1}{4}$ S I3 | S I8 I9I2
	No suitable trees in distance to mark for bearing trees. raise a mound of stone,2 ft.base,1 $\frac{1}{2}$ ft.high W.of the cor. Desc.abruptly 100 ft.
49.00	Canon gulch,dry,csc.SE.asc.abruptly.N.slope 75 ft.to
56.00	Spur,projects E.desc.
58.50	Wash,dry,I5 lks.wide,cse.NE.asc.60 ft.to
64.00	Top.of Ridge,brs.West and SW.
80.00	Set an iron post 3 ft.long,2 ins.in dia.,24 ins.in the ground for the corner of secs.I3,I8,I9 and 24.with brass cap marked
	T 38 S R 21 E | R 22 E S 13 C 18 S 24 S 19 I9I2
	raise a mound of stone 2 ft.base,1 $\frac{1}{2}$ ft.high W.of the cor. Land,broken,volcanic and sandstone surface. Soil,poor,4th.rate. Timber,scat.scrub cedar & pinon.70.00 chs. Scant grazing.
May 15:	At this cor.at apparent noon,I set off 18°55'30"N.on the dec.arc and observe the sun on the mer.The reading of the lat.arc thus obtained is 37°30'30"which is approximately correct.

W.bdy.of T.38 S.R.23 E.

Chains.	Thence S.0°09'W.on true line bet.secs.19 and 24. Over broken surface,draining E.through scat.cedars and pinon.Desc.100 ft.over SW.slope.
6.25	Gulch,dry,csc.SE.asc.75 ft.
19.00	Spur,proj.SE.desc.
29.50	Canon wash,dry,30 lks.wide,csc.S.60°E.asc.
39.00	Spur,proj.E.desc.over large bldrs.on SE slope.
40.00	Set an iron post 3 ft.long,1 in.in dia.,24 ins.in mound of earth & stone,(impossible to set in ground for rock underlying surface)for the $\frac{1}{2}$ sec.cor.with a brass cap marked
	$\frac{1}{2}$ S 24 | S 19 1912
	From which a scrub cedar 3 ins.dia.,brs,N.20°E.25 lks.dist Marked, $\frac{1}{2}$ S 19 B T
	A cedar,6 ins.dia.,brs.S.80°W.31 lks.dist. Marked, $\frac{1}{2}$ S 24 B T
58.00	Wash.dry,200 ft.below spur,25 lks.wide,csc.E.asc.100 ft.along NE slope of bench.
80.00	Set an iron post 3 ft.long,3 ins.in dia.,24 ins.in the ground for the cor.of secs.19,24,25, and 30.with a brass cap marked
	T 38 S R 21 E | R 22 E S 24 S 19 ---|--- S 25 S 30 1912
	raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of the cor. A cedar,10 in dia.,N.71°30'E.70 lks.dist. Marked,T 38 S R 22 E S 19 B T No other suitable bearing trees in limits. Land broken stony and barren. Soil stony and poor 4th,rate. Scat scrub cedar and pinon.scant other vegetation,of short sagebrush and native weeds.Poor grazing.

W.Bdy.of T.38.S., R.22.E.

Chains.

S.0° 09'W.on true line bet.secs.25 and 30,

Over broken surface; through dense scrub cedar and pinon.

5.00 Low rocky ridge, brs.E.& W.; desc.50 ft.

26.50 Wash, dry, 10 lks.wide, course NE. Asc.gradually.

40.00 Set an iron post, 3 ft.long, 1 in.in dia., 24 ins.in
the ground, for the $\frac{1}{4}$ sec.cor.,with brass cap marked

$\frac{1}{4}$ S.25 | S 30

1912

raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high W.of cor.

Trees in distance too scrubby to mark for bearing trees.

Ascend steep N.slope 100 ft.

47.75 Edge of mesa, bears E.& W.

Desc.over sandstone ledge.

49.80 E.tip of Bear's Ear, a butte on Elk Mountains about 25
miles distant, bears N.54°27'W.

80.00 Set an iron post, 3 ft.long, 3 ins.in dia., 24 ins.in
the ground, for the cor.of secs.25,30,31, and 36,
with brass cap marked

T 38 S
R 21 E | R 22 F
S 25 | S 30
S 36 | S 31
1912

A scrub cedar 12 ins.in dia., bears S.80° W.115
lks.dist., marked T 38 S R 21 E S 36 B T

A cedar 10 ins.dia.bears N.67° W.192 lks.dist.
marked T 38 S R 21 F S 25 B T

No other trees in limits suitable for marking; raise a
mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of cor.

Land, broken.

Soil, stony and poor; 4th rate.

Timber, scrub cedar and pinon pine.

Undergrowth, scant sagebrush.

May 15: At this cor.at 3h p.m.l.m.t. I set off 37° 28'
30" on the lat.arc; 18° 58'N.on the decl.arc; and de-
termine a meridian with the solar.

	Chains.	Thence S.0° 09' W. bet. secs. 31 and 36, Over broken bad land surface, draining E.; through scat- ced cedar and pinon.
6.00	Leave mesa, over ledge, N.30° E. & S.30° W.; thence over broken surface.	
18.00	Top of rim rock, on mesa, rolling surface.	
38.50	Wash, 5 lks.wide, coarse E. Asc.	
40.00	Set an iron post, 3 ft.long, 1 in.in dia., 24 ins.in earth and stone, for the $\frac{1}{4}$ sec.cor., with brass cap marked	
	$\frac{1}{4}$ S 36 | S.31 1912	
	raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of the cor. Trees in distance too scrubby to mark.	
52.00	Top of ridge, brs.F.& W. Desc.grad.	
75.00	Top of perpendicular wall of sandstone, 20 ft.high, bears E.& W.; over same and desc.steep S.slope, over boulders 100 ft.	
78.75	Canon wash, dry, 35 lks.wide, cse.F.; asc.100 ft.to	
80.00	The cor.of townships 38 and 39 S., Rs.21 and 22 E. heretofore described.	
	Land, broken.	
	Soil, poor, stony, 4th rate; and barren bad land.	
	Timber, scrub cedar and pinon.	

May 15, 1912.

X
Retracement of Part of the S.Bdy.of T.37 S.R.22 E.

May 24, 1912: At 9h a.m.l.m.t., I set off 37° 33' on
the lat.arc; 20° 48' N.on the decl.arc; and determine
a meridian with the solar at the cor.of secs.4,5,32,
and 33 on the S.bdy.of T.37 S., R.22 E., which is a
sandstone 8 x 7 x 5 ins., firmly set, and marked and
witnessed as described by the surveyor general.
Thence I run W.betsecs.5 and 32 on retracement,
Fall 26 lks.S.of the $\frac{1}{4}$ sec.cor.

40.03

Retracement of Part of the S.Bdy. of T.37 S., R.22 E.

Chains.

This half-mile is therefore N. $89^{\circ} 38' W.$ 40.08 chs.
Fall 65 lks. S. of the cor. of secs. 5, 6, 31, and 32, a
sandstone 5 x 7 x 10 ins. above ground, firmly set
and marked and witnessed as described by the surveyor
general.
The course of this half-mile is therefore N. $89^{\circ} 27' W.$
40.04 chs.

From the last described cor. I run
W. on retracement of the S.bdy. of sec. 31,

40.00 Intersect the $\frac{1}{4}$ sec. cor.

78.28 Fall 28 lks. S. of the corner of Tps. 37 and 38 S., Rs.
21 and 22 E., heretofore described.

The course of this line is therefore N. $89^{\circ} 35' W.$

May 24, 1912.

GENERAL DESCRIPTION.

Through township 38 South the line runs along
the breaks on the west side of Cottonwood Creek, cross-
ing at right angles the washes and sharp ridges on the
east slope of the mesa that lies west of the line.

There is considerable scrub cedar and pinon, of
short size, not much fit for other uses than fuel.
There is not much vegetation, therefore scant grazing.

The land west of the line to the Grand River is
broken surface, canon, bad lands, and cedar mesas, on
which the grazing is poor; there seems but little fit
for agriculture.

Daniel B. Miller

U.S. Surveyor.

Boundaries of T.38 S., R.22 E.

Lines	Designated	True	Dist.	Latitudes		Departures		N.	S.	E.	W.
				Bearing	ch.	chs.	chs.				
South Boundary		N. 89°55'W.	478.95		.70	.....	.....				478.95
West Boundary		N. 0°09'E.	480.50	480.50	.....		1.25	.....		
North Boundary		S. 89°35'E.	38.28	.....	.28	38.28	.....			
North Boundary		Fast	40.00	.....	.....	40.00	.....			
North Boundary		S. 89°27'E.	40.04	.....	.39	40.04	.....			
North Boundary		S. 89°38'E.	40.03	.....	.36	40.03	.....			
North Boundary		East	320.00	.....	.....	320.00	.....			
Colorado G.M.		S. 0°10'W.	479.58	.....	479.58	.....	1.40				
Convergency											.55
		T o t a l s			481.20	480.51	480.14	480.35			
								480.51			480.14
Error in lat. and dep.					0.69						0.21

FINAL OATH OF UNITED STATES SURVEYOR.

I, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for bearing date of the day of 191 , I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of

For final oath of U.S. Surveyor see book "V" T.39 S., R.26 E.

..... of the Meridian, in the State of which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said and sworn to before me }
this day of 191 }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 2 , 1915.

The foregoing field notes of the survey of the west boundary and retracement of part of the north boundary of T.38 South, Range 23 East, of the Salt Lake Base and Meridian, Utah.

executed by Daniel B. Miller
under his special instructions dated March 26 , 1912 , having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

A handwritten signature in ink, appearing to read "O. H. Miller".

U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in has been correctly copied from the original notes on file in this office.

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BOOK A-412

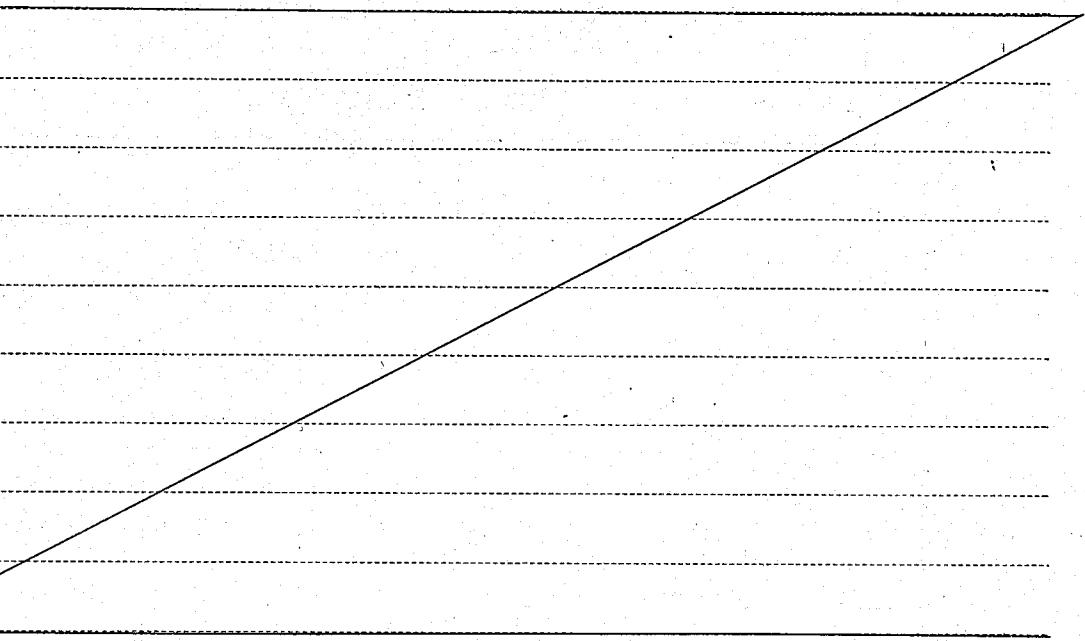
Jul 1 1913

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISIONAL LINES IN

T. 38 S., R. 22 E.



Of the Salt Lake Base and Meridian,

State of UTAH.

EXECUTED BY

Daniel B. Miller and Jos. C. Thoma

Capacity of U. S. Surveyor's, under instructions dated March 26th, 1912,

by the United States Surveyor General to govern surveys included in

No. 16, which were approved by the Commissioner of the General Land

April 2, 1912, pursuant to authority contained in the Act of

dated , 1912.

Survey commenced May 12th, 1912.

Survey completed May 23rd, 1912.

BOOK A-412

INDEX DIAGRAM.

Township _____, Range _____

6	5	4	3	2	1
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18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Subdivision of T. 38 S., R 22 E.

Chains

Survey commenced May 12, 1912, and executed with a Young & Sons light mountain transit No. 8146, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

At my camp in the N. half of sec. 8, T. 39 S., R. 22 E., I examine the adjustments of the transit, and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a. m. and p. m. hours, with a meridian I proceed as follows:

At my camp I set off $37^{\circ} 27' 30''$ N. on the lat. arc, $18^{\circ} 10'$ N. on the decl. arc, and, at 8h 56m, a. m., l. m. t., determine with the solar a meridian and mark a point thereof on a stake set about 10 chs. N. of my station.

At 2h 56m, p. m., l. m. t., I set off $37^{\circ} 37' 30''$ N. on the lat. arc, $18^{\circ} 14'$ N. on the decl. arc, and determine with the solar a meridian, which agrees with the meridian obtained by the a. m. solar.

May 12: I observe Polaris as follows:

Tel.					Watch time.	
D.	o	'	"	H.	M.	S.
Star . .	1 . .	00	00	7	29	00
Flag . .	0 . .	00	00	0	000	00
Flag . .	0 . .	00	00	0	00	00
Star . .	1 . .	00	00	7	30	10
R.						
Star . .	1 . .	01	00	7	31	40
Flag . .	0 . .	00	00	0	00	00
Flag . .	0 . .	00	00	0	00	00
Star . .	1 . .	01	00	7	33	50
Mean	1	00	30	7	31	10
Watch fast of l. m. t.					19	22
L. m. t. of observation				7	11	48

U. C. of Polaris May 12, 1912 10h 07.4m a.m.

L. m. t. of obsn. " " " 7 11.8 p.m.

Time interval to next U.C. 3 55.6

W. az. of Polaris at obsn. $61^{\circ} - 1^{\circ} 61' 00''$

Angle W. flag to star 1 00 30

Flag bears N. $0^{\circ} 00' 30''$ W.

I conclude the adjustments of my instrument are satisfactory.

May 12, 1912.

Subdivision of T. 38 S., R. 22 E.

Chains May 15: At 7h 58m, a. m., l. m. t., I set off 37° 37' 30" N. on the lat. arc, 18° 58' 30" W. on the decl. arc, and at the cor. of secs. 1, 2, 35 and 36, Tps. 38 and 39 S., R. 22 E., heretofore described, determine the meridian with the solar. Thence I run
N. 0° 9' E., bet. secs. 35 and 36.
Asc. over rocky SE. slope of mesa, covered with scattering scrub cedar timber.

- 10.00 Top of mesa, 100 ft. above cor., bears W. and NE., continue over rolling mesa.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins in the ground, for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
- | | |
|------|------|
| 1 | |
| S 35 | S 36 |
- 1912
- From which
- A cedar, 12 ins. in diam., bears S. 73° E., 60 lks. dist.; mkd. T38S R22E S36 BT.
- A cedar, 20 ins. in diam., bears S. 72° W., 90 lks. dist.; mkd. T38S R22E S35 BT.

- 46.00 Edge of canon, bears E. and W.; desc. abruptly over rocky slope of same.
- 58.00 Dry draw, 30 lks. wide in bottom of canon, course E.; asc over broken N. slope of canon.
- 67.00 Small alkali spring on line.
- 71.00 Dry draw, drains SE.; continue asc.
- 76.00 Shurway's ranch road, bears E. and W.
- 90.00 Set an iron post, 3 ft. long, 2 ins. in diam., in mound of earth and stone, on solid rock, for the cor. of secs. 35, 36, 35 and 36, with brass cap mkd.

T38S	R22E
S 35	S 36
S 35	S 36

1912

Raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Land rolling and mountainous and covered with scattering scrub cedar timber.

Soil; sandy loam on mesa; 2nd rate.

Subdivision of T. 38 S., R. 23 E.

Chains.	S. $89^{\circ} 55'$ E., on a random line bet. secs. 25 and 36.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.10	Intersect the E. bdy. of. Tpce at the cor. of secs. 25, 30, 31 and 36, heretofore described.
	Thence I run
	N. $89^{\circ} 55'$ W., on a true line bet. secs. 25 and 36.
	Desc. over nearly level creek bottom.
2.00	Recapture Creek, 30 lks. wide, 2 ft. deep, water muddy, course S. 40° W.; asc.
16.00	Shumway's Ranch road, bears NE and SW.
20.00	Enter scattering scrub cedar timber, bears NE. and SW; ; start asc. over rough E. slope of mesa.
39.00	Top of spur of mesa, projects S.; desc.
40.05	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
	<u>S 25</u>
	S 36
	1912
	Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
48.00	Bottom of desc., bears N. and S.; dry draw, 20 lks. wide, course S. 20° E.
60.00	Start abrupt asc. over a series of ridges, bears N. and S.
77.00	Dry draw, drains S.; continue asc.
80.10	The cor. of secs. 25, 26, 35 and 36.
	Land, rolling and mountainous.
	Soil, sandy loam in creek bottom; adobe and rocky on slopes; 2nd and 4th rates. Timber, scattering scrub cedar.
<hr/>	
	May 15: At 11h 56m, a. m., 1. m. t., I set off $18^{\circ} 55' 30''$ N. on the decl. arc, and at the cor. of secs. 25, 26, 35 and 36, I observe the sun on the meridian, the resulting lat. is $37^{\circ} 28' N.$
	Thence I run
	N. $10^{\circ} 09' 48'' E.$, bet. secs. 25 and 26.
	Asc. over rocky slope of canon, through scattering scrub cedar timber.
14.00	Edge of mesa, bears NE. and SW.; continue over rolling .

Subdivision of T. 38 S., R. 22 E.

- Chains.
 mesa.
- 24.00 South edge of canon, 50 ft. deep, bears E. and W.
- 28.00 Bottom of canon, drains E., asc. abruptly.
- 34.00 North edge of canon, bears E. and W.; continue over rolling mesa.
- 40.00 Set an iron post; 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec, cor. with brass cap mkd.

	$\frac{1}{4}$	
S 26	S 25	
1912		

- Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- 53.00 Leave scattering scrub cedar timber, bears NE. and SW.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins in the ground for the cor. of secs. 23, 24, 25 and 26, with brass cap mkd.

T 38 S R 22 E				
S 23	S 24			
S 26		S 25		
1912				

- Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Land mountainous and rolling. Covered with scattering scrub cedar timber.
- Soil; sandy loam on mesa; rocky and clay in canons and on slopes.

- S. $89^{\circ} 55'$ E., on a random line bet. secs. 24 and 25.
- 40.00 Set a temp. $\frac{1}{4}$ sec. cor.
- 80.21 Intersect the E. bdy. of 1 Twp 0.02 chs. S. of the cor. of secs. 19, 24, 25 and 30, heretofore described.
Thence I run.
- N. $89^{\circ} 56'$ W., on a true line bet. secs. 24 and 25.
Asc. over rocky E. slope of mesa.
- 16.00 Top of mesa, bears NW. and SE.; desc.
- 26.00 Dry draw, 20 lks. wide, course SW.; continue desc.
- 33.00 Bottom of desc., bears NW. and SE.
- 36.00 Dry draw, 30 lks. wide, course S.; asc.
- 39.00 Start asc. over broken E. slope of mesa.

Subdivision of T. 38 S., R. 32 E.

- .10 Set an iron post, 3 ft. long, 1 in. in diam., 34 ins in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
- $\frac{1}{4}$
S 24
-
- S 25
1912.
- Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- .00 Edge of mesa bears N. and S., continue over rolling mesa
. covered with scattering cedar timber.
- .00 Leave scattering scrub cedar timber bears N. and S.
- .31 The cor. of secs. 23, 24, 25 and 26.
- Land, mountainous.
- Soil, sandy loam on the mesa; alkali and clay on the slopes.
Timber, scattering scrub cedar. May 15, 1912.

May 16: At 8h 26m, a. m., l. m. t., I set off $37^{\circ} 29' 30''$
N. on the lat. arc, $19^{\circ} 07' 30''$ N. on the decl. arc, and
at the cor. of secs. 23, 24, 25 and 26, determine the
meridian with the solar.

Thence I run

N. $0^{\circ} 09'$ E., bet. secs. 23 and 24.

Over rolling mesa, covered with sage brush undergrowth
and scattering scrub cedar timber.

- .00 Start gradual desc., bears E. and W.
- .00 Dry draw, 10 lks. wide, course E.; asc.
- .00 Set an iron post, 3 ft. long, 1 in. in diam., 34 ins in the
ground, for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 23 | S 24

1912

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

- .50 Top of asc., bears E. and W.; desc.
- .00 Alkali spring in small draw, drains E.; asc.
- .00 Top of asc., bears E. and W.; desc.
- .00 Set an iron post, 3 ft. long, 2 ins. in diam., 34 ins. in
the ground for the cor. of secs. 13, 14, 23 and 24,
with brass cap mkd.

Subdivision of T. 38 S., R. 22 E.

Chains.

	T 38 S	R 22 E
S. 14		S. 13
S 23		S 24

1912

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

From which

A cedar, 14 ins. in diam., bears N. $18^{\circ}30'$ W.,

153 lks. dist.; mkd. T38S R22E S14 BT.

No other bearing trees within limits.

Land, rolling. Timber, scattering scrub cedar.

Undergrowth, sagebrush.

Soil, sandy loam with indication of alkali in the washes.

S. $89^{\circ} 56'$ E., on a random line bet. secs. 13 and 24.40.00 Set. temp. $\frac{1}{4}$ sec. cor.

80.16 Intersect the E. bdy. of 1Tps 0.07 cha. N. of the cor. of secs. 13, 18, 19 and 24, heretofore described.

Thence I run

N. $89^{\circ} 53'$ W., on a true line bet. secs. 13 and 24.

Over nearly level bottom land, covered with greasewood undergrowth.

8.00 Recapture Creek, 50 lks. wide, 2 ft. deep, course SE.; asc

16.00 Start abrupt aso., over W. slope of mesa.

38.50 Edge of mesa, bears NW. and SE.

40.08 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

	$\frac{1}{4}$
S 13	

S 24

1912

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

53.00 Dry Draw, 10 lks. wide, drains S.

80.16 The cor. of secs. 13, 14, 23 and 24.

Land rolling and mountainous..

Soil, sandy loam and clay; 2nd and 4th rates.
No timber. Undergrowth, greasewood.May 16: At 11h. 56M a. m., 1, m. t., I set off $19^{\circ} 09' 30''$ N. on the decl. arc, and at the cor. of secs. 13, 14, 23 and 24, I observe the sun on the meridian, the resulting lat is $37^{\circ} 30'$ N.

Subdivision of T. 38 S., R. 22 E.

Chains.

N. $0^{\circ} 09'$ E., bet. secs. 13 and 14.

Asc. over rolling mesa covered with scattering scrub cedar timber.

14.00 Edge of mesa, bears E. and W.; desc. over rocky broken N. slope.

28.00 Dry draw, 30 lks. wide, course E.; asc.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	
S 14	S 13 ✓
1912	

Raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

48.00 Top of spur of mesa, bears E. and W.; desc. over rocky S. and E. slope of Recapture Canon.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in mound of earth and rock, on solid bed rock, for the cor. of secs. 11, 12, 13 and 14, with brass cap mkd.

T 38 S R 22 E	
S 11	S 12
<hr/>	
S 14	S 13
1912	

Raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land, mountainous.

Soil, Sandy loam on the mesa; clay and stony on the slopes; 2nd and 4th rates.

Timber, scattering scrub cedar. May 16, 1912.

May 17: At 8h 56m a. m., 1. m. t., I set off $37^{\circ} 31'$ N. on the lat. arc; $19^{\circ} 22'$ N. on the decl. arc, and at the cor. of secs. 11, 12, 13 and 14, determine the meridian with the solar.

Thence I run

S. $89^{\circ} 53'$ E., on a random line bet. secs. 12 and 13.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.30 Intersect the E. bdy. of 1Tpe 0.02 chs. S. of the cor. of secs. 7, 12, 13 and 18, heretofore described.

Thence I run

N. $89^{\circ} 54'$ W., on a true line bet. secs. 12 and 13.

Subdivision of T. 38 S., R. 23 E.

Chains.

- Asc. abruptly over rocky E. slope of point of mesa, projecting S., covered with scattering scrub cedar timber.
- 11.00 E. edge of spur, bears N. 30° W., S. 30° E.; 150 ft. above cor.
- 19.00 Old Bluff-Monticello Road, bears N. 30° W., S. 30° E.
- 33.00 W. Edge of spur, bears N. 40° W. and S.; leave scattering scrub cedar timber; desc. abruptly over W. slope.
- 40.10 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 12

S 13

1912

- Raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 52.50 Bottom of abrupt slope, 200 ft. below top of spur, desc. gradually over bottom land,
- 62.00 Recapture Creek, 20 lks. wide, 3 ft. deep, course SE.; asc.
- 70.00 Leave creek bottom land, bears N. and S.
- 73.00 Enter scattering scrub cedar timber, bears N. and S.
- 80.20 The cor. of secs. 11, 12, 13 and 14.
Land, mountainous; covered with scattering scrub cedar.
Soil, loam on the mesa and slope; sandy in the Creek flat.

N. $0^{\circ} 09'$ E., bet. secs. 11 and 12.

Asc. over N. slope of canon, covered with scattering cedar timber.

- 3.00 Top of spur of ridge, projects E.; desc. over W. slope of Recapture Canon, over a series of ridges and ravines.
- 23.50 Recapture Creek, 20 lks. wide, 3 ft. deep, course SE.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam. 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 11 | S 13

1912

- Raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 51.00 Recapture Creek, 30 lks. wide, course SW.; asc gradually over rolling creek bottom covered with sage brush undergrowth.

Subdivision of T. 38 S., R. 22 E.

Chains.

- 64.00 Dry draw, 40 lks. wide, course E.; asc. over W. slope of Recapture canon.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 1, 2, 11 and 12, with brass cap mkd.

T 38 S R 22 E	
S 2	S 1
<hr/>	
S 11	S 12

1912

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Land rolling. Timber, scattering scrub cedar.
Soil, sandy loam; 2nd rate.

May 17: At 11h 56m., a. m., l. m. t., I set off $19^{\circ} 23'$ N. on the decl. arc, and at the cor. of secs. 1, 2, 11 and 12, observe the sun on the meridian, the resulting lat. is $37^{\circ} 32'$ N.

Thence I run

S. $89^{\circ} 54'$ E., on a random line bet. secs. 1 and 12.

- 40.00 Set temp $\frac{1}{4}$ sec. cor.
- 80.16 Intersect the E. bdy. of Tp. 14 lks. S. of the cor. of secs. 1, 6, 7 and 12, heretofore described.

Thence I run

West, on a true line bet. secs. 1 and 12.

Asc. gradually over ridges and ravines covered with dense cedar timber.

- 10.20 Leave dense cedar timber, bears N. and S.; enter nearly level mesa covered with dense sage brush undergrowth.
- 30.00 Old Bluff-Monticello Road, bears N. 25° E., S. 25° W.
- 40.08 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$.
S 1
<hr/>
S 12

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. 41.00 W. edge of rolling sage brush mesa, bears N. and S.; desc. over broken slope, covered with scattering scrub cedar timber.

Subdivision of T. 38 S., R. 22 E.

Chains.

56.00 Small alkali spring.

63.00 Bottom of abrupt desc. from mesa, 200 ft. below top, continue over gently rolling creek bottom land.

63.00 Head of wash, 5 lks. wide, drains SW.

73.00 Recapture Creek, 30 lks. wide, 2 ft. deep, course S.; asc.

83.10 The cor. of secs. 1, 2, 11 and 12.

Land, mountainous. Timber, scrub cedar. Undergrowth, sagebrush.

Soil, sandy in the bottom lands, sandy loam on the mesa.

N. $0^{\circ} 08'$ E., on a random line bet. secs. 1 and 2.

46.00 Set. temp. $\frac{1}{4}$ sec. cor.

73.40 Intersect the N. bdy. of the Twp., 4 lks. E. of the cor. of secs. 1, 2, 35 and 36, which is

A sandstone, 14x6x18 ins. above ground, firmly set; mkd.

1 notch on the E. and 5 notches on the W. edges. Mound of stone W. of cor.

S. $0^{\circ} 07'$ W., on a true line bet. secs. 1 and 2.

Asc. over rolling land, covered with sage brush undergrowth.

8.00 Top of asc., bears E. and W.; desc.

30.00 Dry draw, 20 lks. wide, drains S. 60° E.; asc.

38.50 Top of asc., bears E. and W.; desc.

39.40 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

1	
S 2	| S 1

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

63.50 Dry draw, 30 lks. wide, drains SE.; asc.

67.50 Top of asc., bears SW. and SE.; desc.

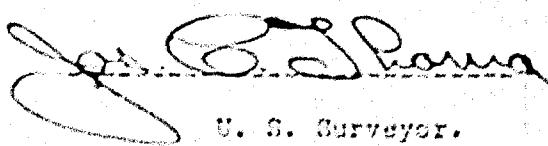
73.40 The cor. of secs. 1, 2, 11 and 12.

Land, gently rolling; covered with sagebrush undergrowth.

Soil, sandy loam; 2nd rate.

No timber.

May 17, 1912.



J. B. Sharrow
U. S. Surveyor.

Subdivision of T.38 S.P.22 E.

Chains.

Note. For establishment of Polaris meridian and test of the solar apparatus, see book "D" page I, May 12, 1912.

The solar attachments were tested at frequent intervals during the subdivisional surveys, on this meridian, and my watch regulated and adjusted at all times to local mean time to within one minute.

May, 1912, at 8h.30m.a.l.m.t. I set off $37^{\circ}27'30''$ on the lat.arc; $19^{\circ}08'N.$ on the dec.arc and determine a meridian at the corner of secs. 2, 3, 34 and 35 on the S. bdy. of the township, heretofore described.

Thence I run N. $0^{\circ}09'E.$ bet. secs. 34 and 35.

Ascend steep rocky slope to mesa. Through scat. scrub cedar and pinon.

10.75

S. edge of mesa, brs. E & W. 175 ft. above sec.corner. Thence over rolling surface, gradually ascending.

23.00

Leave rocky surface, and enter short sagebrush, brs. E&W. Surface sandy loam.

40.00

Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in a mound of stone, (bed rock too near surface to set post in the ground,) for the $\frac{1}{4}$ sec.cor. with brass cap marked

$\frac{1}{4}$ S 34 | S 35

1912

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.

A scrub cedar, 6 in. dia., brs. N. $83^{\circ}38'W.$ 104 lks.

marked, $\frac{1}{4}$ S 34 B T

No other trees available.

42.40

Remains of a prehistoric mesa dwelling showing on the surface, on a low ridge, E&W. desc. grad.

57.25

Wash, 5 lks wide, cse. W. Grad. asc. over bed rock near surface.

Leave short sagebrushbearing E&W.

80.00

Set an iron post 3 ft. long 2 ins. in dia., 24 ins. in mound of stone and earth, (bed rock too near surface to set post in earth,) for the cor. of secs. 26, 27, 34, and 35. with brass cap marked

T 38 S	R 22 E
S 27	S 26
S 34	S 35

1912

Subdivision of T. 38 S. P. 33 E.

Chains.

raise a mound of stone, 3 ft. base, 1 $\frac{1}{2}$ ft. high N. of the cor.
Trees in distance too scrubby to mark.
Land rolling, about 70.00 chs. Broken and mountainous,
16.00 chs.
Soil, sandy loam and stony. 2nd, to 4th, rate.
Timber, scrub cedar and pinon.
Short scat. sagebrush on mesa.
Fair to good grazing on mesa.

-
- Thence I run, S.89°55'E.
On a random line bet. secs. 26 and 35.
40.00 Set temp. $\frac{1}{4}$ sec.cor.
80.II Intersect the N & S line, 7 lks. S. of the cor. of secs.
25, 26, 35 and 36.
Thence, N.89°58'W.
On true line bet. secs. 26 and 35.
Ascending steep rocky W side of canon, to mesa. Through
scat. cedar and pinon.
5.85 Top of steep asc. 140 ft. above sec.cor. Edge of mesa brs.
North, and S.30°W. grad. asc. over rolling, sagebrush mesa.
17.00 Ranch road, brs. NW & SE.
33.70 Telephone line bet. Bluff and Grayson. brs. N & S.
40.05 Set an iron post 3 ft. long 1 in. in dia., 24 ins, in the
ground for the $\frac{1}{4}$ sec.cor. with brass cap marked

S-26
S-35
1912

- Dig pits, 18 X 18 12 ins. EEW of post 3 ft. dist and raise
a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high N. of the cor.
A scrub cedar, 7 ins. in dia., brs. N85°30'W. 94 lks. dist.
marked, 1/2 S 26 E T
No other trees in limits.
48.50 Stage road bet. Bluff and Grayson. brs. N & S.

Subdivision of T 38 S.R.22 R.

- .90 Top of low ridge, brs. N&S. Leave scat. timber. Enter short sage brush, brs. N&S. grad. desc.
- .II The corner of secs. 26, 27, 34 and 35.
Land rolling, about 74.00 chs. Mtns. 6.00 chs.
Soil, rocky and sandy mesa loam.
Good grazing on mesa. balance barren.
Timber, scrub, cedar and pinon, 55.00 chs. scattered.
Undergrowth, sagebrush.
-
- Thence I run, N. 0°09' E. bet. secs. 26 and 27.
Over Open rolling sagebrush mesa. An occasional scrub cedar or pinon. Gradual descent.
- 0.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor. with brass cap, marked
- | | |
|--------------------|------|
| $\frac{1}{4}$ S 27 | S 26 |
|--------------------|------|
- I9I2
- dig pits, 18 X 18 X 12 ins. N. & S. of post, 3 ft. dist. and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of the cor. A scrub cedar, 16 ins. in dia., brs. S. 88°30' E. 554 lks. dist. marked, $\frac{1}{4}$ S 26 B T
No other trees in limits.
- 0.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for the corner of secs. 22, 23, 26 and 27, with brass cap marked
- | | |
|--------|--------|
| T 38 S | R 22 E |
| S 22 | S 23 |
| S 27 | S 26 |
- I9I2
- From which, a scrub cedar, 15 ins. in dia., brs. N. 54° E. 72 lks. dist. marked, T 38 S R 22 E S 23 B T
A cedar, 10 ins. in dia., brs. S. 2° E. 93 lks. dist. mkd. T 38 S R 22 E S 26 B T
A cedar, 12 ins. in dia., S. 68°30' W. 110 lks. dist. marked
T 38 S R 22 E S 27 B T
A cedar, 12 ins. in dia., brs. N. 85°15' W. 94 lks. dist. marked,
T 38 S R 22 E S 22 B T

Subdivision of T 38 S R 22 E.

	Chains.	Land rolling and level. Soil, Sagebrush mesa and bed rock surface. Timber, scat. cedar and pinon. Fair grazing on mesa.
May 16:		At this corner at apparent noon I set off $19^{\circ}09'30''$ N.on the dec.arc and observe the sun on the meridian. The lat. arc reads $37^{\circ}29'30''$, which is satisfactory.
		Thence I run $S.89^{\circ}58'E.$ on random line bet. secs. 23 and 26.
40.00		Set temp $\frac{1}{4}$ sec.cor.
80.20		Intersect the N. & S. line, 5 lks. N. of the cor. of secs. 23, 24, 25 and 26. Thence, $N.89^{\circ}56'W.$ on true line bet. secs. 23 and 26. Over rolling mesa, through scat. scrub cedar and pinon, and short growth sagebrush.
32.50		Telephone line bet. Bluff and Grayson. N&S.
40.10		Set an iron post 3 ft. long 1 in. in dia., 24 ins. in the ground, for the $\frac{1}{4}$ sec.cor. with brass cap mkd.
		$\begin{array}{|c|c|}\hline S & 23 \\ \hline S & 26 \\ \hline\end{array}$ 1913
		dig pits, 18 X 18 X 12 ins, E & W of post 3 ft. dist. and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
45.20		Stage road, bet. Bluff and Grayson, N & S,
70.00		Enter dense timber.brs. N&S.
80.20		The corner of secs. 22, 23, 26 and 27. Land, rolling. Soil, sandy loam, 1st, rate if irrigated. Timber, scrub cedar and pinon. Undergrowth, sagebrush. Fair grazing on mesa.
May 16:		At this cor. at 2h.p.m.l.m.t. I set off $37^{\circ}29'30''$ on the lat.arc; $19^{\circ}11'N.$ on the dec.arc and determine a meridian with the solar.

Subdivision of T.38 S R 22 E.

Thence I run
N.0°09'E.betsecs.22 and 23.
Over rolling mesa,grad.desc.through dense cedar & pinon
and short sagebrush.

9.75 Edge of mesa,leave timber,desc.steep canon side from
mesa. Over rim rock 30 ft.high.

5.50 Wash,dry,cse.W.100 ft.below mesa.asc.

8.00 Spur,projects W.desc.

9.50 Wash,dry,10 lks.wide,cse.W.asc.100 ft.

2.25 Rocky spur,proj.W.point of mesa brs.NE & SE.desc.abrupt
N.rocky slope,115 ft.

0.00 Set an iron post 3 ft.long 1 in.in dia.,24 ins.in stone
and earth,for the $\frac{1}{4}$ sec.cor.with brass cap marked

$$\begin{array}{c|c} \frac{1}{4} S 22 & S 23 \\ \hline & \checkmark \end{array}$$

I912.

Trees in limits too scrubby,to mark for B.Ts.
raise a mound of stone 2 ft.base,1 $\frac{1}{2}$ ft.high W.of the cor.

May 16th,1912.
May 17:at this cor I set off 37°30' on the lat.arc;19°21'
N.on the dec.arc and determined a meridian at 9:am.l.m.t.
Thence N.0°09'E.betsecs.22 and 23.

3.00 Wash,dry,20 lks.wide,cse.W.Point of mesa brs.NE.& SE.desc
steep NW.slope.

0.00 Base of steep slope;brs.E & W.Thence over rolling surface
of sandy loam,through scat cedar & pinon.

2.00 Wash,dry,15 lks.wide,7 ft.deep.cse.SW.
3 ft.long

0.00 Set an iron post 2 ins.in dia.,24 ins.in earth & stone,
for the corner of secs.I4,I5,22 and 23 with brass cap mkd.

T 38 S	R 22 E
S 15	S 14
S 22	S 23

I912

From which,A cedar,18 in.in dia.,brs.N.34°E.165 lks.dist.
marked,T 38 S R 22 E S I4 B T

A cedar,15 in.in dia.brs,S 32°30'E108 lks,dist.marked,
T 38 S R 22 E S 23 B T

No trees in remaining secs.suitable for marking.

Subdivision of T.38 S R 22 E.

Chains.

raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, W of the cor.
Land broken and rolling.
Soil, rocky and sandy.
Timber, scrub cedar & pinon.
Undergrowth, short sagebrush. 9.75 chs.
Scant grazing.

Thence I run,

S. 89°56' E. on random line bet. secs. I4 and 23.

40.00 Set temp $\frac{1}{4}$ sec.cor.

80.12 Intersect the N & S line, 15 lks. N. of the cor. of secs.
I3, I4, 23 and 24.

Thence, N. 89°49' W.

On true line bet. secs. I4 and 23.

Over rolling mesa, grad. asc. through scat. timber.

30.85 Stage road bet. Bluff and Grayson. brs. NW and SE. grad. desc.

33.70 Telephone line bet. bluff and Grayson. brs. NW & S.E.

35.00 Low ridge, N & S.

40.06 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in earth
& stone, for the $\frac{1}{4}$ sec.cor. with brass cap marked

	1
S	I4
	2
S	23
1912	

from which, A cedar, 10 ins. in dia., brs, S 44°W 40 lks. dist.
marked, $\frac{1}{4}$ S 23 B T

A cedar, 15 ins. dia., brs. N 47°W 43 lks. dist marked $\frac{1}{4}$ S I4
B T

Continue desc. over rocky SW. slope, through dense timber.

A small drain from cor, brs, S 70°W.

78.70 Canon wash, dry, cse SW. 25 lks. wide, 7 ft. deep.

80.12 The corner of secs. I4, I5, 22 and 23.

Land rolling & broken.

Soil, rocky and sandy.

Timber, scrub cedar and pinon.

(17)

Subdivision of T.38 S R 22 E.

May 17: At apparent noon I set off $19^{\circ}23'N.$ on the dec. arc and observe the sun on the meridian, at the cor. of secs. I4, I5, 22 and 23. The resulting lat. is $37^{\circ}30'30''$ which shows the instrumental lat. to be practically right.

Thence I run

N. $0^{\circ}09'E.$ bet. secs. I4 and I5.

Over rolling sandy mesa, grad. desc. through scat cedar and pinon.

Leave sandy loam, and enter surface of large broken sandstone boulders, brs., E & W.

Low rocky spur, proj. E.

Canon wash, dry, 25 lks. wide, cse. E. then S. asc. steep stony slope 175 ft.

Edge of mesa, brs., E & W. thence over rolling land.

Set an iron post 3 ft. long 1 in. in dia., 24 ins. in earth and stone, for the $\frac{1}{4}$ sec. cor. with brass cap marked

$\frac{1}{4}$	S I5	|	S I4	\checkmark
1912				

Trees too scrubby to mark for B.Ts.

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.

Enter short sagebrush & sandy loam. brs. E & W.

Telephone line bet. Bluff and Grayson, brs. NW and SE.

Wash, dry, 6 lks. wide, cse. W. grad. asc.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in a mound of earth & stone, (bed rock too near surface to set post in ground,) for the cor. of secs. I0, II, I4 and I5. with brass cap, marked,

T 38 S		R 22 E	
S I0		S II	
S I5		S I4	
1912			

from which a cedar, 10 ins. in dia., brs. N. $73^{\circ}30'E.$ 70 lks.

marked T 38 S R 22 E S II B T

A cedar, 10 ins. dia., brs. S. $28^{\circ}E$ II 3 lks. dist. marked, T 38 S R 22 E S I4 B T

Subdivision of T 38 S R 22 E.

Chains.	A cedar, 12 ins. in dia., brs. S $6^{\circ}30'W$ 27 lks. dist. marked, T 38 S R 22 E S I5 B T
	A cedar, 12 ins. in dia., brs. N $38^{\circ}W$ I43 lks. dist. marked T 38 S R 22 E S IO B T
	Land, rolling and broken.
	Soil, sandy and stony.
	Timber, scrub cedar and pinon. Undergrowth, sagebrush.
	Grazing, fair.
	Thence I run S. $89^{\circ}49'W$. on random line bet. secs. II and I4. Set temp. $\frac{1}{4}$ sec. cor.
40.00	Intersect the N & S line, 2 lks. S. of the cor. of secs. II, I2, I3 and I4. Thence N. $89^{\circ}50'W$. on true line bet. secs. II and I4. Ascend rocky broken slope.
3.25	Point of spur, proj. SE. desc.
7.75	Draw, cse. S. asc. E slope.
I5.00	E. edge of mesa, I25 ft. above sec. cor. brs. N&S.
27.40	Wash, IO lks. wide, cse. SE.
40.07 ₂	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor. with brass cap marked
	$\frac{1}{4}$ S II — S I4
	1912
	dig pits 18 X 18 X 12 ins. E & W. of post, 3 ft. dist: and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of the cor.
52.50	Stage road bet. Eluff and Grayson, N & S. desc. grad.
72.60	Wash, 5 lks. wide, dry, cse. S and SW. enter scat. trees.
60.15	The corner of secs. IO, II, I4 and I5. Land rolling. & broken. Soil sandy bench loam and stony. 2nd. to 4th, rate. Timber, scrub cedar and pinon. Grazing fair.

Subdivision of T. 38 S., R. 22 E.

May 17. At 3h 30m., p. m., l. m. t., I set off $37^{\circ} 31'$ on the lat. arc; $19^{\circ} 25' 30''$ N., on the decl. arc, and determine a meridian with the solar at the cor. of secs. 10, 11, 14 and 15. Thence I run

N. $0^{\circ} 09'$ E., bet. secs. 10 and 11.

Over rolling mesa, grad. desc. through scattering scrub cedar and short sage brush.

9.50 Wash, 5 lks. wide, cse. SW. grad. asc.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor. with brass cap mkd.

$\frac{1}{4}$ S10 | S 11

1912

from which, a cedar, 10 ins. in diam., brs. S. $50^{\circ} 30'$ E., 74 lks. marked $\frac{1}{4}$ S11 BT.

A cedar, 8 ins. in diam., brs. N. 22° W., 38 lks. dist. mkd. $\frac{1}{4}$ S 10 BT.

From the cor. desc. to canon.

54.70 Stage road bet. Bluff and Grayson brs. NW. and S. 35° E.

69.00 Canon wash, 15 lks. wide, cse. E., asc. steep rocky slope.

30.00 Set an iron post, 3 ft. long, 2 in. in diam., 24 ins. in the ground, for the cor. of secs. 2, 3, 10 and 11 with brass cap marked

T 38 S R 22 E
S 3 | S 2

S 10 | S 11
1912

from which a scrub cedar, 8 ins. in diam., brs. N. 84° E. 138 lks. marked, T 38 S R 22 E S 2 BT.

A cedar, 6 ins. diam., brs. S. $41^{\circ} 30'$ E., 50 lks. dist.; marked T 38 S R 22 E S 11 BT.

A cedar, 12 ins. in diam., brs. S. 66° W., 166 lks. dist.; marked T 38 S R 22 E S 10 BT.

A cedar, 20 ins. diam., brs. N. 55° W., 63 lks. dist.; marked T 38 S R 22 E S 3 BT.

Land rolling and broken.

Soil stony and sandybench loam, 1st rate if irrigated.

Good grazing. Timber scattering May 17th, 1912.

scrub cedar. Undergrowth, Daniel B. Miller,
cagebrush.

U. S. Surveyor.

Subdivision of T. 38 S., R. 23 E.

Chains.

May 17: At 3h 26m, p. m.; 1: m: t.; I set off $37^{\circ} 32' N.$
on the lat. arc; $19^{\circ} 26' N.$ on the decl. arc, and at the
cor. of secs. 2, 3, 10 and 11, determine the meridian with
the solar.

Thence I run

S. $89^{\circ} 50' E.$, on a random line bet. secs. 2 and 11.

40.00 Set temp. $\frac{1}{4}$ sec. ccr.

80.38 Intersect the N. and S. line at the cor. of secs. 1, 2,
11 and 12.

Thence I run

N. $89^{\circ} 50' W.$, on a true line bet. secs. 2 and 11.

Asc. over W. slope of Recapture Canon, through scattering
cedar timber.

10.00 Dry draw, 10 lks. wide, course SE.; continue asc.

22.00 Top of ridge, bears N. and S.; desc: over rocky E. slope
of canon.

35.00 Bottom of desc., bears N. and S.; asc:

40.14 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the ~~40~~ sec. cor., with brass cap mkd.

$$\begin{array}{r} \frac{1}{4} \\ \text{S } 2 \\ \hline \text{S } 11 \end{array}$$

1912

Raise a mound of stone $\frac{1}{2}$ ft; base, $1\frac{1}{2}$ ft. high, N. of cor.

46.00 Top of spur of Ridge, projects S.; desc. abruptly over
large boulders.

67.00 Dry draw, 20 lks. wide, draise SE.; asc. abruptly.

75.00 E. rim of mesa, bears N. and S.; enter dense cedar timber.

80.38 The cor. of secs. 2, 3, 10 and 11.

Land, mountainous.

Soil, sandy loam covered with large boulders.

Timber, cedar.

May 17, 1912.

Subdivision of T. 38 S., R. 23 E.

Chains.

May 23: At 8h 57m, a. m., l. m. t., I set off $37^{\circ} 32' N.$
on the lat. arc.; $20^{\circ} 36' 30'' N.$ on the decl. arc, and
at the cor. of secs. 2, 3, 10 and 11, determine the meridian
meridian with the solar.

Thence I run

N. $0^{\circ} 09'$ E., on a random line bet. secs. 2 and 3.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.54 Intersect the N. bdy. of the Twp. 9 lks. E. of the cor.
of secs. 2, 3, 34 and 35; which is

A granite, $8 \times 6 \times 10$ ins. above ground, firmly set; mkd.
with 2 notches on the E. and 4 notches on the W. edges.

No accessories.

Thence I run

S. $0^{\circ} 05'$ W., on a true line bet. secs. 2 and 3.

Desc. gradually over gently rolling mesa covered with
scattering scrub cedar timber

6.50 N. edge of canon, bears NE. and SW.

23.00 Bottom of canon, drains SW.; asc. over point of ridge,
projecting W.

39.54 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	
S 3	S 3
1912	

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

44.50 Top of point projecting W.; desc.

55.50 Dry canon draw, drains SE.; asc. abruptly.

61.50 S. edge of canon, bears NW. and SE.; continue over level
mesa covered with dense cedar timber.

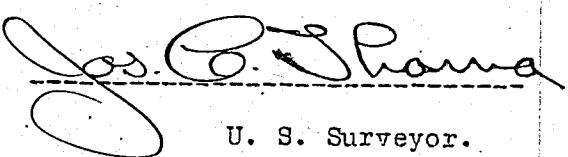
79.54 The cor. of secs. 2, 3, 10 and 11.

Land broken.

Soil, sandy loam; 2nd rate.

Timber, cedar.

May 23, 1912.



U. S. Surveyor.

Subdivision of T. 38 S., R. 22 E.

Chains.

- May 18: At 8h 15m, a.m., 1. m. t., I set off $37^{\circ} 27' 30''$ on the lat. arc; $19^{\circ} 34'$ N. on the decl. arc and determine a meridian at the cor. of secs. 3, 4, 33 and 34, on S.bdy. of Tp., heretofore described.
Thence I run, N. $0^{\circ} 08'$ E., bet. secs. 33 and 34.
Over broken mountainous land, through scat. cedar and pinion
Ascend N. side canon to mesa.
28.00 Top of asc. on sandstone ledge. 40' ft. high, thence rolling
29.00 Top of ridge bears E. and W.; desc.; E. tip of Bear's Ear bea
N. $56^{\circ} 33'$ W.
40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
mound of earth and stone, (impossible to set post in
the ground on account of stone near surface,) for $\frac{1}{4}$ sec.
cor. with brass cap mkd.

$\frac{1}{4}$	S 33	S 34
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1912

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
47.00 Wash, dry, 10 lks. wide; cse. NE.; desc.
58.00 Top of low spur, proj. NE.; desc.
79.50 Gulch, dry, 20 ft. deep, 1 ch. wide; sse. NW.
80.00 Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in
mound of stone on solid bed rock, for the cor. of secs.
27, 28, 33 and 34, with brass cap mkd.

T 38 S R 22 E

S 28	S 37
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S 33	S 34
------	------

1912

- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
No trees in distance fit for marking for E. Ts.
Land, broken and mountainous.
Soil, barren and stony. 4th rate.
Timber, scat. scrub cedar and pinion. Scant grazing.

Subdivision of T.38 S R.22 E.

- Mains. S. $89^{\circ}55'$ E.on random line bet.secs.27 and 34.
- 4.00 Set temp. $\frac{1}{4}$ sec.corner.
- 4.06 Intersect the N & S line, 13 lksS. of the cor.of secs. 26,27,34 and 35.
Thence I run, ,
S. $89^{\circ}59'$ W.on true line bet.secs.27 2nd 34.
Over W slope,from mesa,300 ft.to base,through scat.cedar and pinon.Very broken surface.over rim rock.
- 8.00 Base of descent.brs.N & S.W.thence over open rolling surface.
- 27.50 Wash,dry,15 lks.wide,5 ft.deep,cse,N. 70° W.
- 52.00 Wash,20 lks.wide,cse.N.5 ft.deep.
- 40.03 Set an iron post,3 ft.long,I in.in dia.,24 ins.the ground for the $\frac{1}{4}$ sec.cor.with a brass cap marked

S 27
S 34
1912.
- dig pits 18 X 18 X 12 ins.E & W.of post,3 ft.dist.and raise a mound of earth $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft.high N.of the corner.
- 0.60 Wash,20 lks.wide,5 ft.deep,cse.N.dry.
- 2.25 Wash,40 lks.wide,dry,cse.NW.5 ft.deep.
- 8.00 Canon wash,dry,70 lks.wide,10 ft.deep,cse.SW.Enter dense Cedar and pinon.brs.NE & SW.
- 0.06 The corner of secs.27,28,33 and 34.
Land broken and rolling,
Soil,rocky & gravelly,poor,2nd,to 4th,rate.
Timber scrub cedar & pinon,about 20.00 chs.
- ~~May 18~~ At this corner at apparent noon,I set off $19^{\circ}36' N.$ on the dec.arc and observe the sun on the meridian,the reading obtained on the lat.arc being, $37^{\circ}29'30''$,which shows the instrumental lat.to be approximately correct.

Subdivision of T.38 S R.22 E.

Chains.	Thence I. run N.0°08'E. bet. secs. 27 and 28. Over broken mountainous land, through scat. cedar & pinon. Gradually ascending.
10.00	Low ridge, brs. E & W. desc. grad.
11.00	Desc. abruptly.
18.00	Wash, dry, I ch. wide, cse. W.
23.00	N. side of gulch, E&W.
38.00	Head of gulch. cse. SW. asc.
40.00	Set an iron post 3 ft. long 1 in. in dia., 24 ins. in stone and earth (stone bottom too near surface to set post in the earth,) for the $\frac{1}{4}$ sec. cor. with brass cap marked
	$\frac{1}{4}$ S 28 | S 27 ✓ I912
	from which a scrub cedar, 8' in. in dia., brs. S. 9°30'E. 38 lks. marked $\frac{1}{4}$ S 27 B T
	A scrub cedar, 10 in. in dia., brs. N. 27°30'W. 38 lks. dist. Marked, $\frac{1}{4}$ S 28 B T
75.00	Point of mesa, brs, N. 10°W. & N. 10°E. over rim rock.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in mound stone, for the corner of secs. 21, 22, 27 and, 28 with a brass cap marked,
	T 38 S R 22 E S 21 | S 22 S 28 | S 27 I912
	raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor. Land broken & mountainous.
	Soil, barren and stony. poor 4th, rate.
	Timber, cedar and pinon, scrubby growth.
	Scant grazing.
	Corner situated on the W. edge of mesa, bearing nearly N & S. on high point, solid bed rock.

Subdivision of T.38 S R 22 E.

hains. Thence I run
 N. $89^{\circ}59'$ E.on random line bet.secs.22 and 27.
 0.00 Set temp $\frac{1}{4}$ sec.corner.
 9.88 Intersect the N & S line,8 lks.N.of the cor.of secs.22,
 23,26 and 27;. Thence I run
 N. $89^{\circ}58'$ W.on true line,bet.secs.22 and 27.
 Over rolling mesa,through thick growth of cedar and pinon.
 10.40 W.edge of mesa,over perpendicular sandstone wall,30 ft.
 leave timber.
 0.00 Base of steep descent,125 ft.below mesa,thence over
 rolling surface.,
 9.94 Point for corner falls on edge of wash.Impractical to
 set post.
 10.00 Center of wash,dry,5 ft.deep,cse.S.
 10.15 Set an iron post,3 ft.long,1 in.in dia.,24 ins.in the
 ground,for witness corner to the $\frac{1}{4}$ sec.cor.with brass
 cap marked

W C	S 22
	S 27

 1912
 raise a mound of stone,2 ft.base,1 $\frac{1}{2}$ ft.high N.of the cor.
 15.40 Wash,dry,3 ft.deep,20 lks.wide,cse.S.
 5.00 Enter dense cedar & pinon.Wtns.land,N&S.Asc.steep mesa
 slope.
 7.00 E.edge of mesa at top of sandstone ledge,perpendicular.
 Rim rock brs,H&S,
 9.88 The cor.of secs.21,22,27 and,28.
 Land,broken and mountainous.
 Soil,poor,barren and stony.
 Scant grazing.
 Dense cedar & pinon,about 35.00 chs.
 At this cor.at 4h.p.m.l.m.t I set off $37^{\circ}29'30''$ N.on the
 lat.arc; $19^{\circ}39'$ N.on the dec.arc and determine a meridian
 with the solar.

May 18th,1912.

Subdivision of T.38 S.R.22 E.

Chains.

May 20: At 9h.a.m.l.m.t. I set off $57^{\circ}29'30''$ on the lat. arc; $20^{\circ}00'30''$ N. on the dec. arc at the cor. of secs. 21, 22, 27 and 28, and determine a meridian with the solar.

Thence I run

$11.0^{\circ}08' E.$ bet. secs. 21 and 22.

Over high sandstone table, thin top soil, through scat. cedar & pinon.

4.50 NW. edge of mesa brs., NE & SW. over sandstone rimrock, and steep canon side, 175 ft.

20.00 Head of gulch, dry, cse. S. $70^{\circ}W.$ Asc. steep SW slope 225 ft. on broken bad land surface, to rim rock 10 ft. high.

39.40 Edge of mesa, brs. N. $60^{\circ}W$ and SE. thence over rolling mesa.

40.00 Set an iron post 3 ft. long 1 in. in dia., 24 ins. in a mound of stone on solid bed rock, for the $\frac{1}{4}$ sec. cor. with brass cap marked,

$\frac{1}{4}$ S 21	S 22
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I9I2

raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

Trees in distance too scrubby to mark for B.Ts.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in mound of stone and earth, on bed rock surface, for the corner of secs. 15, 16, 21 and 22, with brass cap marked

T 38 S R 22 E
S 16 | S 15
S 21 | S 22

I9I2

A cedar, 6 ins. in dia., brs. N. $20^{\circ}30'$ E. 98 lks. dist.

Marked, T 38 S R 22 E S 15 B T

A cedar, 8 ins. in dia., brs. S. $38^{\circ}E.$ 50 lks. dist.

Marked, T 38 S R 22 E S 22 B T

A cedar, 7 ins. in dia., brs. S $34^{\circ}15'W.$ 115 lks. dist.

Marked, T 38 S R 22 E S 21 B T

A cedar, 5 ins. in dia., brs. N. $74^{\circ}30'W.$ 103 lks. dist.

Marked T 38 S R 22 E S 16 B T

Land, broken and rolling. Soil, thin sandy loam on mesa. balance barren wash surface stony poor 4th, rate.

Timber, scattering scrub cedar,

Subdivision of T.38 S R 22 E.

Chains.

- Thence I run
S.89°58'E.on random line bet.secs.I5 and 22.
40.00 Set temp. $\frac{1}{4}$ sec.cor,
80.00 Intersect the N & S line 5 lks.S.of the cor.of secs.I4,
I5,22 and 23.
Thence West on true line bet.secs.I5 and 22.
Over open rolling surface.
8.50 Wash,dry,I5 lks.wide,cse.S.
12.00 Base of spur,N&S.asc.
23.00 Top of bad land spur,N&S.
29.50 Wash,dry,8 lks.wide,cse.SE.asc.steep wash canon side.
40.00 Set an iron post 3 ft.long,1 in.in dia.,24 ins.in stone
and earth,on stone base,for the $\frac{1}{4}$ sec.cor.with brass cap
marked $\frac{1}{4}$

S	I5
S	22
1912	

raise a mound of stone 2 ft..base $1\frac{1}{2}$ ft.high N.of the cor.
1.50 Edge of mesa,at top of sandstone ledge,125 ft.above base.
Sandstone rim brs.S and N.70°E.Enter scat.cedar and
pinon,brs.N & S.
0.00 The cor.of secs.I5,I6,21 and 22.
Land,broken and rolling.
Soil,loose sandy loam,thin,on bed rock.Poor,4th,rate.
Very scat.cedar & pinon.Scant grazing.
ay 20: At this cor.at 11h.54m.a.m.l.m.t.I set off 20°02'N.on the
dec.arc and observe the sun on the meridian.The resulting
lat.reading is 37°30'30".which is correct,nearly.

Subdivision of T.38 S.R.2 E.

Claims.

- Thence I run N.0°08'E. bet. sect. 9 and 10.
 Descending NW.slope of mesa, through scrub cedar & pines.
 3.00 Bottom of canon gulch, sec.SW.ase.
 9.00 Edge of mesa, brs.NE & SW. thence over rolling mesa, open
 sagebrush surface.
 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the
 ground for the 1 sec.cor. with brass cap, marked

1	S 9	S 10
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 1912
 from which a cedar, 6 ins. in dia., brs. S. 65°E 53 lks. dist.
 marked, 1 S 10 S T.
 A cedar, 8 ins. in dia., brs. S. 19°30'W. 158 lks. dist.
 marked, 1 S 9 S T.
 60.00 set an iron post 3 ft. long 2 ins. in dia., 24 ins. in the
 ground, for the cor. of sects: 3, 4, 9 and 10 with a brass
 cap marked

T 38 S	R 22 E
S 4	S 3
S 9	S 10

 1912
 from which, a cedar, 10 in. in dia., brs. N. 78°45'E. 254 lks.
 marked, T 38 S R 22 E S 3 R T.
 A cedar 14 ins. in dia., brs. S. 53°30'E. 125 lks. dist.
 marked, T 38 S R 22 E S 10 R T.
 A cedar, 18 ins. in dia. brs. S. 42°E. 143 lks. dist.
 marked T 38 S R 22 E S 9 R T.
 A cedar, 12 ins. in dia., brs. N. 15°W. 46 lks. dist.
 marked, T 38 S R 22 E S 4 R T.
 Land 9.00 broken canon surface. 71.00 chs. rolling mesa,
 open sagebrush surface.
 Soil, mesa loam. 71.00 chs. Ist. rate if irrigated.
 Undergrowth, short sagebrush.
 The E. tip of Bear's Ear, about 25 miles dist. is N. 06°58'W.

Subdivision of T.30 S. R. 22 W.

Chains.
Thence I run, East,
On random line bet. secs 3 and 10.
40.00 Set temp. $\frac{1}{2}$ sec. cor:
20.00 Intersect the N & S. line 6 lks. N. of the cor. of secs. 3,
3, 10 and 11.
Thence N. $89^{\circ} 58'$ W. on true line bet. secs. 3 and 10.
Over rolling mesa, grad. desc.
18.75 Wash, 5 lks. wide, cse. SE.
26.00 Stage road bet. Bluff and Grayson. On low ridge. brs. NW & SW.
40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in earth,
for the $\frac{1}{2}$ sec. cor. with brass cap marked
$$\begin{array}{r} S \\ \hline S. 10 \end{array}$$

from which, a cedar, 6 ins. in dia., brs, N. II E. 375 lks. dist.
marked $\frac{1}{2}$ S 3 B T
A cedar, 6 ins. in dia., brs, S. $30^{\circ} 30'$ E. 77 lks. dist.
marked, $\frac{1}{2}$ S 10 B T
48.30 Telephone line bet. Bluff and Grayson. brs. N & S.
64.75 Wash, dry, 6 lks. wide. cse. S.
80.00 The cor. of secs. 3, 4, 9 and 10.
Land, rolling mesa.
Soil, sandy mesa loam, 1st. rate if irrigated. fair grazing.
An occasional scrub cedar or pinon.
Undergrowth, short sagebrush.

May 20th, 1912

Daniel B. Miller,
U.S. Surveyor.

May 23: At 1h 57m, p. m., 1. m. t., I set off $37^{\circ} 33'$ N.
on the lat. arc, $20^{\circ} 39'$ N. on the decl. arc, and, at
the cor. of secs. 3, 4, 9 and 10, determine the meridian
with the solar.

Thence I run

N. $0^{\circ} 08'$ E., on a random line bet. secs. 3 and 4.

40.00 Set temp. $\frac{1}{2}$ sec. cor.
79.72 Intersect the N. bdy. of the Fwp. 2 lks. E. of the cor.
of secs. 3, 4, 33 and 34; which is

Subdivision of T.38 S.R.2 E.

Chains.	
	Thence I run N.0°08'E. bet. secs. 9 and 10.
	Descending NW.slopr of mesa,through scrub-cedar & pinon.
3.00	Bottom of canon gulch,cse.SW.asc.
9.00	Edge of mesa,brs.NE & SW.thence over rolling mesa,open sagebrush surface.
40.00	Set an iron post,3 ft.long,1 in.in dia.,24 ins.in the ground for the $\frac{1}{4}$ sec.cor.with brass cap,marked $\begin{array}{|c|c|} \hline \frac{1}{4} & S 9 \\ \hline & S 10 \\ \hline \end{array}$ I9I2 from which a cedar,6 ins.in dia.,brs,S 85°E 53 lks.dist. marked, $\frac{1}{4}$ S 10 B T. A cedar,8 ins.in dia.,brs.S.19°30'W.158 lks.dist. marked, $\frac{1}{4}$ S 9 B T.
80.00	set an iron post 3 ft.long 2 ins.in dia.,24 ins.in the ground,for the cor.of secs:3,4,9 and 10 with a brass cap marked $\begin{array}{|c|c|} \hline T & 38 & S & R & 22 & E \\ \hline & S 4 & & S 3 & & \\ \hline & S 9 & & S 10 & & \\ \hline \end{array}$ I9I2 from which,a cedar,10 in.in dia.,brs.N.78°45'E.254 lks. marked,T 38 S R 22 E S 3 B T A cedar 14 ins.in dia.,brs.S.53°30'E.125 lks.dist. marked,T 38 S R 22 E S 10 B T A cedar,18 ins.in dia.brs.S 42°W.143 lks.dist. marked T 38 S R 22 E S 9 B T A cedar,12 ins.in dia.,brs,N.15°W.48 lks.dist. marked,T 38 S R 22 E S 4 B T. Land 9.00 broken canon surface.71.00 chs.rolling mesa, open sagebrush surface. Soil,mesa loam,71.66 chs.Ist.rate if irrigated. Undergrowth,short sagebrush. The E.tip of Bear's Ear.about 25 miles dist.is N.66°58'W.

Subdivision of T. 38 S., R. 22 E.

35.00 Edge of draw, bears NW. and SW.; desc. abruptly over broken NW. slope; leaves dense cedar, continue in scattering cedar timber.

39.00 Dry draw, drains NW.; asc. gradually.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

T
S 32 | S 33

1912

Raises a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Top of asc., bears E. and W.; desc. gradually.

58.00 Dry draw, 40 lks. wide, course SW.; asc.

64.00 Top of asc., bears E. and W.; desc.

68.00 Dry draw, drains SE.; asc.

72.00 Top of asc., nears E. and W.; desc.

74.00 Dry draw, 10 lks. wide, course SE; asc.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 28, 29, 32 and 33, with brass cap mkd.

T 38 S R 22 E
S 29 | S 30

S 32 S 33

1912

Raises a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Land broken.

Soil, clay and alkali. Timber, cedar.

S. 89° 55' E., on a random line bet. secs. 28 and 33.

40.00 Set temp $\frac{1}{4}$ sec. cor.

80.00 Intersect the N. and S. line at the cor. of secs. 27, 28, 33 and 34.

Thence I run

N. 89° 55' W., on a true line bet. secs. 28 and 33.

Over broken rolling land covered with scattering scrub cedar timber.

8.00 E. rim of canon, 4 chs. wide, 75 ft. deep, bears N. 70° E.

Subdivision of T. 38 S., R. 22 E.

- Chains. A sand stone, 3x8x12 ins., broken and lying on the ground, with 3 notches on two opposite edges.; small mound of stone W. of cor.
- I reestablish this cor. by setting the same stone, 8 ins. in the ground, with the three notches on the E. and W. edges. Raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- Thence I run
- S. $0^{\circ} 07'$ W., on a true line bet secs. 3 and 4.
- Over gently rolling mesa, covered with dense sage brush undergrowth.
- 17.70 Cabin, 3 chs. E. of line; unoccupied.
- 39.72 Set an iron post 3 ft. long, 1 in. in diam.; 24 ins. in the ground for the ~~sec.~~ cor. with brass cap m'd.
- | | | |
|------|---------------|-----|
| S 4 | $\frac{1}{4}$ | S 3 |
| 1912 | | |
- Dig pits 18x18x12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft base, $1\frac{1}{2}$ ft. high, W. of cor.
- 67.70 Dry draw, 10 lks. wide, course SW.
- 78.70 Dry draw, 10 lks. wide, course SW.
- 79.72 The cor. of secs. 3, 4, 9 and 10.
- Land gently rolling.
- Soil; sandy loam; 1st rate.
- May 23, 1912.
-
- May 18: At 8h 36m, a. m., l. m. t., I set off $37^{\circ} 28'$ N. on the lat. arc, $19^{\circ} 35'$ N. on the decl. arc, and at the cor. of secs. 4, 5, 32 and 33; on S. bdy. of Tp., hereto-far described, determine a meridian with the solar.
- Thence I run
- N. $0^{\circ} 07'$ E., bet. secs. 32 and 33.
- Asc. over rocky S. slope of mesa, covered with dense cedar timber and large boulders.
- 4.00 Top of rim 30 ft. high, bears NW. and SE.; continue over level mesa, covered with dense cedar timber.

Subdivision of T. 38 S., R. 22 E.

Chains.

14.00 Edge of mesa, bears NW. and SE.; desc. abruptly over broken NE. slope; leave dense cedar, continue in scattering cedar timber.

33.00 Dry draw, drains NW.; asc. gradually.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	
S 32	S 33

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Top of asc., bears E. and W.; desc. gradually.

58.00 Dry draw, 40 lks. wide, course SW.; asc.

64.00 Top of asc., bears E. and W.; desc.

68.00 Dry draw, drains SE.; asc.

72.00 Top of asc., nears E. and W.; desc.

74.00 Dry draw, 10 lks. wide, course SE; asc.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 28, 29, 32 and 33, with brass cap mkd.

T 38 S R 22 E

S 29 | S 28

S 32 | S 33

1912

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land broken.

Soil, clay and alkali. Timber, cedar.

S. $89^{\circ} 55'$ E., on a random line bet. secs. 28 and 33.

40.00 Set temp $\frac{1}{4}$ sec. cor.

80.00 Intersect the N. and S. line at the cor. cf secs. 27, 28, 33 and 34.

Thence I run

N. $89^{\circ} 55'$ W., on a true line bet. secs. 28 and 33.

Over broken rolling land covered with scattering scrub cedar timber.

2.00 E. rim of canon, 4 chs. wide, 75 ft. deep, bears N. 70° W.

Subdivision of T. 38 S., R. 23 E.

Chains.

- | | |
|-------|---|
| 6.00 | W. rim of canon bears N. 70° W.; asc. |
| 12.00 | Top of asc., bears N. and S.; desc. |
| 18.00 | Bottom of desc., bears N. and S.; asc. |
| 19.00 | Head of draw, drains N. 10° W. |
| 24.00 | Top of asc., bears N. and S.; desc. |
| 40.00 | Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec.cor, with brass cap mkd. |

$\frac{1}{4}$
S 28
S 33

1912

- | | |
|-------|--|
| 76.00 | Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. N. of cor.. |
| 80.00 | Dry draw, 50 lks. wide, course S.; asc. |
| | The cor. of secs. 28, 29, 32 and 33. |
| | Land rolling and broken. |
| | Soil, sandy and alkali; 4th rate. |
| | <u>Timber</u> , scattering scrub cedar. |
| | May 18: At 11h 56m, a. m., 1. m. t., I set off $19^{\circ} 36' 30''$ |
| | N. on the decl. are, and at the cor. of secs. 28, 29, |
| | 32 and 33, observe the sun on the meridian; the resulting |
| | lat. is $37^{\circ} 39' N.$ |

Thence I run

N. $0^{\circ} 07'$ E., bet. secs. 28 and 29.

Desc. over rolling land covered with scattering scrub cedar timber.

- | | |
|-------|--|
| 12.00 | Dry draw, 10 lks. wide, drains SE.; asc. over rocky knob. |
| 32.00 | Top of knob, bears NW. and SE.: desc. |
| 40.00 | Set an iron post, 3 ft. long, 1 in. in diam. 24 ins. in the
ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd. |

$\frac{1}{4}$
S 29 S 28

1912

- | | |
|-------|--|
| 41.00 | Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. |
| | Start abrupt asc. over rocky S. slope of ridge, bears N. |
| | 75° W. and S. 75° E. |
| 46.00 | Top of ridge, bears N. 75° W. and S. 75° E.; desc. |
| 64.00 | Dry draw, 15 lks. wide, drains SE. |

(83)

Subdivision of T. 38 S., R. 22 R.

Chains:

- 77.00 Top of ridge bears NW. and SE.
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in
 the ground for the cor. of secs. 20, 21, 28 and 29,
 with brass cap mkd.

T 38 S R 22 E

S 20	S 21
S 29	S 28

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Land rolling.

Soil, sandy; 3rd rate.

Scattering scrub cedar timber.

S. $89^{\circ} 55'$ E., on a random line bet. secs. 21 and 28.

40.00 Set. temp. $\frac{1}{4}$ sec. cor.

80.04 Intersect the N. and S. line, 2 lks. S. of the cor. of secs.
 21, 22, 27 and 28.

Thence I run.

N. $89^{\circ} 56'$ W., on true line bet. secs. 21 and 28.

Desc. over broken land, covered with dense scrub cedar
 timber.

0.40 Edge of point of mesa, bears N. and S.; leave dense scrub
 cedar timber; desc. over broken W. slope of mesa.

15.50 Bottom of abrupt desc. over broken W. slope, 150 ft.
 below the top, bears N. and S.; continue over nearly
 level land.

16.00 Dry draw, 15 lks. wide, course SW.; continue desc.

28.00 E. rim of canon, bears N. and S.; desc. abruptly.

34.00 Bottom of canon, 50 ft. deep, drains S.; asc. abruptly.

38.50 W. rim of canon, bears N. and S.; asc. gradually.

40.02 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
 the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 21

S 28

1912

Raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Subdivision of T. 38 S., R. 22 E.

Chains.

- 66.00 Dry draw, 10 lks. wide, drains SE.; continue asc.
- 72.00 Top of ridge, bears N. and S.; desc. through dense scrub cedar timber.
- 80.04 The cor. of secs. 20, 21, 28 and 29.
Land broken.
Soil, sandy loam; 3rd rate.
Timber, scrub cedar.

May 18, 1912.

May 20: At th 56m, a. m., l. m. t., I set off $37^{\circ} 29' 30''$ N. on the lat. arc, $20^{\circ} 00' 30''$ N. on the decl. arc, and at the cor. of secs. 20, 21, 28 and 29, determine the meridian with the solar.

Thence I run

N. $0^{\circ} 07'$ E., bet. secs. 20 and 21.

Over rolling SE. slope of ridge, covered with scattering scrub cedar timber.

- 10.00 Dry draw, 15 lks. wide, course SE.
- 34.00 Top of spur of ridge, projects SE.; desc.
- 39.00 Dry draw, 10 lks. wide, drains E.; asc.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec cor., with brass cap mkd.

1	
$\frac{1}{4}$	
S 20	S 21

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

- 46.00 Dry draw, 20 lks. wide, course SE.; continue asc.
- 62.00 Edge of mesa, bears NE. and SW., continue over nearly level mesa.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 16, 17, 20 and 21, with brass cap mkd.

T 38	S 22 E
S 17	S 16
S 20	S 21

1912

Big pits, 18x18x12 ins., in each sec. $5\frac{1}{2}$ ft. dist.; and

Subdivision of T. 38 S., R. 23 E.

Chains. raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, broken.

Soil, sandy loam; 3rd rate. Scattering cedar timber.

S. $89^{\circ} 56'$ E., on a random line bet. secs. 16 and 21.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.99 Intersect the N. and S. line 6 lks. S. of the cor. of secs. 15, 16 21 and 22.

Thence I run

S. $89^{\circ} 57'$ W., on a true line bet. secs. 16 and 21.

Over rolling mesa. covered with sage brush undergrowth.

24.00 W. edge of mesa, bears N. and S.; desc. abruptly over rough W. slope. Head of draw, drains NW.

31.00 Bottom of abrupt desc., bears N. and S.; desc. gradually.

32.00 Dry draw, 40 lks. wide, course S.; asc.

39.99 $\frac{1}{2}$ Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 16
—
S 21

1913

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

70.00 E. edge of mesa, bears NW. and SW., continue over same

79.99 The cor. of secs. 16, 17, 20 and 21.

Land, broken. Undergrowth sagebrush. No timber. Undergrowth sagebrush.

Soil, sandy loam, covered with volcanic rock; 4th rate.

Thence I run

N. $0^{\circ} 07'$ E., bet. secs. 16 and 17.

Asc. overrolling mesa, covered with scattering scrub cedar timber, and sage brush undergrowth.

20.00 Start abrupt desc. over N. and E. slope of mesa.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 17 | S 16 ✓
—
1913

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Subdivision of T. 38 S., R. 23 E.

Chains 41.00	Dry draw, 10 lks. wide, drains NE.; asc.
48.00	Top of asc., bears NW and SE.; desc.
56.00	Dry draw, 10 lks. wide, drains SE.; asc.
62.00	Top of asc., bears E. and W.; desc.
69.00	Draw, 20 lks. wide, drains SE.; asc.
80.00	Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor of secs. 8, 9, 16 and 17, with brass cap mkd:

T 38 S	R 22 E
S 8	S 9
<hr/>	
S 17	S 16

1912

Dig pits 18x18x12 ins., in each sec., $5\frac{1}{2}$ ft. dist.; and
raise a mound of earth, 4 ft. base, 3 ft. high, W. of
cor.

Land broken. Timber, scattering scrub cedar. Undergrowth
sagebrush.
Soil sandy loam; 3rd rate.

May 30: At 11h 56m., a. m., l. m. t., I set off $20^{\circ} 02'$
N. on the decl. arc, and at the cor. of secs. 8, 9, 16
and 17, observe the sun on the meridian, the resulting
lat is $37^{\circ} 31'$ N.

Thence I run

N. $89^{\circ} 57'$ E., on a random line bet. secs. 9 and 16.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.10 Intersect the N. and S. line, 2 lks. N. of the cor. of secs.
9, 10, 15 and 16.

Thence I run

S. $89^{\circ} 58'$ W., on a true line bet. secs. 9 and 16.

Over broken S. slope of mesa.

12.00 Dry draw, 20 lks. wide, drains SW.; asc.

16.00 Spur of ridge, projects S.; desc.

27.50 Bottom of desc., bears N. and S.; asc.

31.00 Top of asc., bears N. and S.; desc.

36.00 Dry draw, 20 lks. wide, course S.; asc.

40.05 Set an iron post, 3 ft. long 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.

Subdivision of T. 38 S., R. 22 E.

Chains.

- 43.00 Top of asc., bears NW. and SE.; desc.; into canon.
- 48.00 Bottom of canon, drains SE.; asc. abruptly.
- 53.00 West edge of canon, bears NW. and SE.
- 80.10 The cor. of secs. 8, 9, 16 and 17.
Land, broken.
Soil, sandy loam on mesa; rocky on slopes; 3rd and 4th rates.
No timber.

Thence I run

N. $0^{\circ} 07'$ E.; bet. secs. 8 and 9.

Asc. overrolling mesa, covered with scattering scrub cedar timber and sage brush undergrowth.

38.00 Leave scattering cedars, bears NE. and SW.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	S 8	S 9
	1912	

Dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

64.00 Top of asc., bears NE. and SW.; desc. slightly

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 4, 5, 8 and 9, with brass cap mkd.

T 38 S	R 22 E
S 5	S 4
—	
S 8.	S 9

1912

Dig pits, 18x18x12 ins. in each sec., $5\frac{1}{2}$ ft. dist.; and raise a mound of earth 4 ft. base 2 ft. high, W. of cor.

Land, gently rolling.

Soil, sandy loam; 1st rate. Timber, scattering scrub cedar. Undergrowth, sagebrush.

N. $89^{\circ} 58'$ E., on a random line bet. secs. 4 and 9.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.85 Intersect the N. and S. line, at the cor. of secs. 3, 4, 9 and 10.

Subdivision of T. 38 S., R. 22 E.

	Chains. Thence I run S. $89^{\circ} 58'$ W., on a true line bet. secs. 4 and 9. Over open rolling mesa, covered with sage brush under-growth.
11.50	Dry draw, 5 lks. wide, drains SW.
16.00	Dry draw, 10 lks. wide, drains SW.
39.92	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
	$\frac{1}{4}$ <u>S 4</u>
	S 9
	1912
	Dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
44.00	Dry draw, 10 lks. wide, drains S.; asc.
60.00	Top of asc., bears NE. and SW.; des. slightly.
79.85	The cor. of secs. 4, 5, 8 and 9. Land, gently rolling. Soil, sandy loam; 1st rate. No timber. Undergrowth, sage-brush.
	Thence I run N. $0^{\circ} 07'$ E., on a random line bet. secs. 4 and 5.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.64	Intersect the N. bdy. of the Twp., 11 lks. W. of the cor. of secs. 4, 5, 32 and 33; which is A sand stone, 6x4x8 ins. above ground, firmly set; mkd. with 4 notches on the E. and 2 notches on the W. edges; No accessories.
	Thence I run S. $0^{\circ} 13'$ W., on a true line bet. secs. 4 and 5. Desc. gradually over rolling open mesa, covered with sage-brush undergrowth.
18.60	Dry draw, 10 lks. wide, course SW.
39.64	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

Subdivision of T. 38 S., R. 22 E.

Chains.

1
4

S 5 | S 4 ✓

1912

Dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

47.60 Dry draw, 10 lks. wide, drains NW.

79.64 The cor. of secs. 4, 5, 8 and 9.

Land, gently rolling.

Soil, sandy loam; 1st rate. Undergrowth, sagebrush.

No timber.

May 20, 1912

May 21: At 8h 56m, a. m., l. m. t., I set off $37^{\circ} 28'$ N. on the lat. arc, $20^{\circ} 13'$ N. on the decl. arc, and, at the cor. of secs. 5, 6, 31 and 32, on S.bdy.of Tp., heretofore described, determine a meridian with the solar.

Thence I run

N. $0^{\circ} 07'$ E., bet. secs. 31 and 32.

Desc. over rolling land covered with greasewood and sage brush undergrowth.

6.50 Desc. abruptly over sand stone rim, 30 ft. high, into Cottonwood Creek bottom.

12.00 Cottonwood Creek, 30 lks. wide, 2 ft. deep, water muddy, course E.; asc.

20.00 Top, of asc., bears E. and W.; desc.

24.00 Cotton wood Creek, 30 lks. wide, 2 ft. deep water muddy, course SW.; asc.

28.00 Cut bank of Cottonwood Creek, 30 ft. high, bears NE. and SW.; asc. over rolling mesa sloping S. and E.

36.00 Top of asc., bears E. and W.; desc.

37.00 Dry draw, 50 lks. wide, drains SE.: asc.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap md.

Subdivision of T. 38 S., R. 22 E.

Chains.

S 31	S 32
1912	

- Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 41.00 Dry draw, 30 lks. wide, course SE.; asc.
- 65.00 Mesa ruins, $1\frac{1}{2}$ chs. E. of line.
- 72.00 Desc. to Creek bottom, covered with sage brush, and
greasewood undergrowth and scattering cottonwood trees.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in
the ground for the cor. of secs. 29, 30, 31 and 32,
with brass cap mkd.

T 38 S R 22 E

S 30	S 29
S 31	S 32

1912

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of
cor.

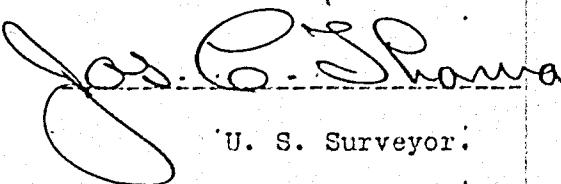
Land, rolling. Undergrowth, greasewood and sagebrush.

Soil; sandy loam; sandy along Cottonwood Creek.

Cottonwood timber along Creek banks.

May 21: At 11h 56m a. m., 1. m. t., I set off $20^{\circ} 14'$
 $30''$ N. on the decl. arc, and, at the cor. of secs.
29, 30, 31 and 32, observe the sun on the meridian,
the resulting lat. is $37^{\circ} 29' N.$

May 21, 1912



J. C. Sharrow
U. S. Surveyor.

Subdivision of T.38 S R 22 E.

- Chains. May 21; 1912 at 9:a.m.l.m.t. I set off $37^{\circ}28'30''$ on the lat.arc; $20^{\circ}13'N.$ on the dc.arc, and determine a meridian at the cor.of secs. 29, 30, 31 and 32.
 Thence I run
 $S.89^{\circ}55'E.$ on random line bet.secs. 29 and 32.
 40.00 Set temp $\frac{1}{4}$ sec.cor.
 79.88 Intersect the N. & S.line 7 lks.S. of the cor.of secs. 28, 29, 32 and 33.
 Thence N. $89^{\circ}58'W.$ on true line bet.secs. 29 and 32.
 Over broken surface,draining S.through scat.cedar & pinon.
 6.00 Spur, projects,S.from N. $70^{\circ}W.$ asc.along SW.slope of spur.
 39.25 E.edge of mesa.rim rock brs,NE.and S.10 chs.
 39.94 Set an iron post $\frac{1}{4}$ in.in dia., 24 ins.in mound of stone
 and earth, on bed rock, for the $\frac{1}{4}$ sec.cor.with brass cap
 marked

$$\begin{array}{c} \frac{1}{4} \\ \hline S.29 \\ S.32 \\ 1912 \end{array}$$

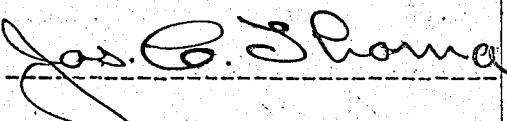
 from which a cedar, 5 ins.in dia., brs, S. $21^{\circ}45'E.$ 86 lks.
 marked, $\frac{1}{4}$ S 32 B T
 A cedar, 6 in.in dia., brs. N. $44^{\circ}W.$ 67 lks dist.mkd.
 $\frac{1}{4}$ S 29 B T
 51.25 W.edge of mesa, brs, N & S.desc.over rim rock 20 ft,high,
 thence steep desc.on W slope,over broken side.
 66.40 L.Bank of Cottonwood Creek, 3 ft.high, stream 1 ft.deep. 30 lks.
 wide,cse.S,muddy.
 68.50 R.bank.of channel.3 ft.high.
 73.00 Asc.bench.20 ft.
 79.88 The corner of secs. 29, 30, 31 and 32.
 Land,broken, and mountainous,
 Soil, poor stony and 4th,rate.
 Scat.cedar & pinon, and an occasional Cottonwood along
 the creek of that name.
 Scant grazing.

Subdivision of T.38 S.R. 22 E.

Chains.	Thence N. $39^{\circ}55'W$. On random line bet. secs. 30 and 31.
40.00	Set temp $\frac{1}{4}$ sec.cor.
78.59	Intersect the W.bdy of the township, 7 lks.N. of the cor. of secs. 25, 30, 31 and 32; heretofore described. Thence I run, $S.89^{\circ}58'E$.on true line bet. secs. 30 and 31. Over broken surface, draining SE. into Cottonwood Creek. through scat.cedar and pinon. Desc. 100 ft.
35.00	Gulch, dry, cse. SE.
38.59	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground, for the $\frac{1}{4}$ sec.cor. with brass cap marked
	$\frac{S.30}{S.31}$ 1912
	raise a mound of stone, 2 ft. base, 1 ft. high N. of the cor.
39.60	Spur, proj. S. desc. abruptly 200 ft.
50.00	Gulch, dry, cse. N. $70^{\circ}E$. asc. 150 ft. to
55.60	Top of ridge. N&S. Desc. steep E slope into Cottonwood Canon. 350 ft. below spur.
68.60	Base of steep slope. N&S.
78.59	The cor. of secs. 29, 30, 31 and 32. Land broken and mountainous. Soil, poor 4th, rate, and bad lands. Timber, scat.cedar, and pinon. At this corner at apparent noon, I set off $20^{\circ}14'30''N$. on the dec.arc; and observe th sun on the meridian. The observed lat. is $37^{\circ}28'30''$ indicating the instrumental latitude to be sufficiently accurate.
	May 21, 1912. Daniel B. Miller, U.S. Surveyor.

Subdivision of T. 38 S.R. 22 E.

- Chains. N. 0° 07' E., bet. secs. 29 and 30.
- Desc. gradually over Cottonwood Creek bottom land, covered with sage brush and greasewood undergrowth, and cotton wood trees along Creek bank.
- 3.50 Cottonwood Creek, 30 lks. wide, 2 ft. deep, water muddy, course SE.; 30 ft. sand banks on either side.
- 7.50 Left creek bottom; asc. gradually.
- 21.00 Cottonwood Creek, 30 lks. wide, 2 ft. deep, water muddy, course SW.; continue along sandy bottom of same.
- 32.00 Water falls in Cottonwood Creek, 16 ft. high.
- 35.00 Leave Creek bottom, sheer sand bank 40 ft. high, bears E. and W.; asc. over rolling land through dense greasewood undergrowth.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
- | | |
|---------------|--------|
| $\frac{1}{4}$ | |
| S 30 | S 29 ✓ |
- 1912
- Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 48.00 Dry draw, 20 lks. wide, course SW.
- 60.00 Dry draw, 30 lks. wide, drains SW.; asc. over a series of ridges and ravines, over rocky S. slope.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 19, 20, 29 and 30, with brass cap mkd.
- | | |
|---------------|------|
| T 38 S R 22 E | |
| S 19 | S 20 |
| S 30 | S 29 |
- 1912
- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Land, rolling.
- Soil, sandy; 3rd rate. Undergrowth, greasewood and sagebrush. Timber, cottonwood. May 21, 1912.



U. S. Surveyor.

Subdivision of T.38 S.R 22 E.

Chains.

- May 21; At 2h.a.m.l.m.t. I set off $37^{\circ}29'30''$ on the lat. arc. and $20^{\circ}15'30''$ N. on the dec. arc and determine a meridian with the solar at the cor. of secs. 19, 20, 29 and 30. Thence, S. $89^{\circ}58'30''$ E.
- On random line bet. secs. 20 and 29.
- 40.00 Set temp $\frac{1}{4}$ sec.cor.
- 79.84 Intersect the N&S.line, 3 lks.S. of the cor. of secs. 20, 21, 28 and 29. ✓
Thence I run, N. $89^{\circ}59'W$. on true line, bet. secs. 20 and 29. Over broken rock surface and bad lands, draining SW, desc. 100 ft. to
- 8.35 Wash, dry, 20 lks.wide, cse.S.
- 15.80 Wash, dry, 20 lks.wide, cse.S. $70^{\circ}E$. asc: 100 ft.
- 39.92 Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in mound of stone and earth, on rock bed, for the $\frac{1}{4}$ sec.cor. with brass cap, marked

$$\begin{array}{r} \frac{1}{4} \\ \frac{5}{20} \\ \hline \frac{5}{29} \end{array} \checkmark$$

1912
- raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of the cor. Continue asc. from cor. over washed barren bad land surface.
- 56.80 Ridge, 115 ft. above sec.cor.brs. N&S. Desc. 75 ft. to
- 79.84 The corner of secs. 19, 20, 29 and 30.
Land broken and mountainous.
Soil, rocky and bad land. 5th, rate.
Scant grazing.
An occasional scrub cedar or pinon.
-
- Thence I run
N. $89^{\circ}58'W$. on random line bet. secs. 19 and 30.
- 40.00 Set temp $\frac{1}{4}$ sec.cor.
- 78.53 Intersect the W.bdy of the Tp. 27 lks.N. of the corner of secs. 19, 24, 25 and 30, heretofore described. ✓
Thence, N. $89^{\circ}50'E$. on true line, bet. secs. 19 and 30. Over broken W.slope of Cottonw ood Canon. desc. 50 ft.
- 4.50 Draw, dry, cse. NE. asc.
- 10.00 Spur, proj. N. $60^{\circ}E$. from S.desc. steep wash slope 350 ft.

Subdivision of T.38 S.R.22 E.

Chains 29.00	Wash, dry, 20 lks. wide, cse. N. 70° E.
31.50	Point of spur, proj. N.E.
33.00	Right bank of Cottonwood Creek, 2 ft. high. I ch. wide, 6 in. deep. cse. south about 5 chs, thence SE.
	About 5.00 chs. N. is a water fall, over a cliff about 15 ft. high.
	An occasional Cottonwood tree near creek.
36.50	Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the ground, for the 1 sec. cor. with a brass cap marked
	S 19 F 30 1912
	raise a mound of stone 2 ft. base, 1 ft. high N. of the cor. Asc. 150 ft. from the cor.
35.00	Long spur, projects.
37.00	Head of gulch, cse. S. Thence grad. asc. along SW slope.
38.50	The cor. of secs. 19, 20, 29 and 30. land, broken and mountainous. Soil; poor, bad lands and sandstone rock. 5th, rate. little vegetation, therefore scant grazing.
	An occasional Cottonwood tree on Cottonwood Creek banks.

May 21st, 1912

Daniel B. Miller

U.S. Surveyor.

(40)
Subdivision of T. 38 S., R. 23 E.

Chains.

N. 0° 07' E., bet. secs. 19 and 20.

Asc. over broken, rocky SW. slope of mesa, covered with scattering scrub cedar timber and greasewood undergrowth.

24.00 S. edge of mesa, bears N. and SE.; continue over nearly level mesa, covered with dense scrub cedar timber and sage brush undergrowth.

46.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	
S 19	S 20 "
1912	

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

56.00 Dry draw, 20 lks. wide, drains SW.

59.00 N. edge of mesa, bears NE. and SW.; desc. over broken rock NW. slope.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 17, 18, 19 and 20, with brass cap mkd.

T 38 S R 23 E	
S 18	S 17
S 19	S 20

Raise a mound of stone $2\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor. land, broken.

Soil, sandy loam on the mesa; 1st rate; volcanic and covered with large boulders on the slopes, 4th rate.

Timber, scattering scrub cedar. May 21, 1912.

Undergrowth, greasewood.

Jos. C. Show
U. S. Surveyor.

Subdivision of T.38 S.R.38 E.

Chains.

May 22: at 10h.a.m.l.m.t. I set off $37^{\circ}30'30''$ on the lat. arc; $20^{\circ}25'11''$ on the dec. arc, and determine a meridian with the solar at the corner of secs. 17, 18, 19 and 20.

Thence S. $89^{\circ}59'11''$ E.

On random line bet. secs. 17 and 20.

40.00

Set temp. $\frac{1}{4}$ sec.cor.

79.82

Intersect the N & S line, $\frac{1}{2}$ lks.S. of the cor. of secs. 16, 17, 20 and 21.

Thence I run

S. $89^{\circ}57'11''$ W. on true line bet. secs. 17 and 20.

Over open rolling mesa. Through scat. cedar and short sagebrush.

15.00

Low ridge, brs. N & S. desc. grad.

39.91

Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the ground for the $\frac{1}{4}$ sec.cor. with brass cap marked,

$\frac{1}{4}$
 S 17
 $\frac{1}{2}$ 20
 1912

from which, a cedar, 14 ins. in dia., brs. S. $50^{\circ}E$ 366 lks. dist. marked, $\frac{1}{4}$ S 20 B T

A cedar, 10 ins. in dia., brs. N. $62^{\circ}30'W$. 39 lks. dist.

marked, $\frac{1}{4}$ S 17 B T

52.60

Edge of mesa, brs. N & S.W. desc. steep NW slope from mesa.

79.82

300 ft. below mesa. The corner of secs. 17, 18, 19, & 20.

Land, rolling and broken.

Soil, poor, bad land and washed canon sides. 2nd, to 5th, rate.

Undergrowth, sagebrush.

Timber, scattering scrub cedar.

Subdivision of T.38 S.R.22 E.

Chains.	Thence I run
	S.89°50'W.on random line betsecs.I8 and I9.
40.00	Set temp $\frac{1}{4}$ sec.cor.
78.25	Intersect the W.bdy.of the township,44 lks.S.of the cor. of secs.I3,I8,I9 and 24, heretofore described. Thence S.89°51'E.on true line betsecs.I8 and I9. Descending over broken mountainous surface draining E.into Cottonwood Creek.
4.00	Gulch,near head.Dry,cse SE.asc.
12.25	Over mesa rim.bears.NW and South.steep desc.of washed bad land stony surface,about 250 ft.
28.25	Right bank of Cottonwood Creek,I5 ft.high..
30.25	Channel of creek,water 10 ins.deep.cse.SW.
31.25	Over same,asc.I5 ft.bank.
38.25	Set an iron post 3 ft.long,I in.in dia.,24 ins.in the ground,for the $\frac{1}{4}$ sec.cor.with brass cap marked,
	<u>S.18</u> <u>S.19</u> 1912
	raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high N.of the cpr.
44.25	Wash,30 lks.wide,cse.N.70°W.asc.steep SW.slope,I50 ft.
53.25	Top of abrupt asc.grad.asc.along N.side of wash.
67.00	Enter wash,20 lks.wide,cse.S.70°W.
75,50	Alkali spring in wash,small flow of water,course W.
77.25	Leave wash,from N.70°E.
78.25	The corner of secs.I7,I8,I9, and 20. Land broken and generally barren. Soil,stony and poor 4th,rate. An occasional scrub cedar or pinon.A few Cottonwood trees along creek bank.

May 22, 1912.

Daniel B. Miller,
U.S. Surveyor.

Subdivision of T. 38 S., R. 22 E.

Chains

May 22: At 8h 56m, a. m., l. m. t., I set off $37^{\circ} 30' 30''$ N. on the lat. arc; $20^{\circ} 35'$ N. on the decl. arc, and at the cor. of secs. 17, 18, 19 and 20, determine the meridian with the solar.

Thence I run

N. $0^{\circ} 07'$ E., bet. secs. 17 and 18.

Asc. over broken S. and W. slope of mesa, over a series of ridges and ravines covered with scattering scrub cedar timber.

1.00 Dry draw, 20 lks. wide, drains W.

29.00 Top of asc.; projects W.; desc.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	
S 18	S 17
1912	

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. ofc or.

44.00 Dry draw, 20 lks. wide, drains W.; continue desc.

64.00 Dry draw, 30 lks. wide, 20 ft. deep, drains SW.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in a mound of stone, on solid rock, for the cor. of secs. 7, 8, 17 and 18, with brass cap mkd.

T 38 S R 22 E

S 7	S 8
S 18 S 17	

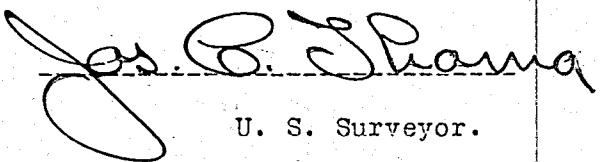
1912

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land rolling. Timber, scattering scrub cedar.

Soil, sandy loam and stony; 3rd rate.

May 22: At 11h 56m, a. m., l. m. t., I set off $20^{\circ} 26'$ N. on the decl. arc, and at the cor. of secs. 7, 8, 17 and 18, observe the sun on the meridian, the resulting lat. is $37^{\circ} 31'$ N.



U. S. Surveyor.

Subdivision of T.38 S.R.22 E.

Chains.	May 22: At the cor. of secs. 7, 8; I7 and I8 at 3; p.m.l.m.t. I set off $37^{\circ}31'$ on the lat.arc, $20^{\circ}28'$ N.on the dec. arc and determine a meridian with the solar. Thence I run, N. $89^{\circ}57'$ E.on random line bet.secs.8 and I7. Set temp. $\frac{1}{4}$ sec:cor.
40.00	Intersect the N & S.line, I6 lks.N.of the cor.of secs. 8, 9, I6 and I7. Thence N. $89^{\circ}56'$ W.,on true line bet.secs.8 and I7. Over rolling land,in scat.cedar & pinon, and short sage. brush,grad.asc.
33.80	Low ridge, brs.N&S.desc.grad.
39.91	Set an iron post 3 ft.long, 1 in.in dia., 24 ins.in the ground, for the $\frac{1}{4}$ sec.cor, with brass cap,marked $\begin{array}{c} \frac{1}{4} \\ \text{S.8} \\ \hline \text{S.17} \\ \text{1912} \end{array}$ from which,a cedar, 8 in.in dia., brs.N. $52^{\circ}30'$ E.II9 lks. marked, $\frac{1}{4}$ S.8 B T A cedar, 10 ins,in dia., brs.S. $15^{\circ}30'$ W.I00 lks.dist. marked, $\frac{1}{4}$ S.17 B T
53.80	W.edge of mesa, Over sandstone ledge, desc.steep W.slope, over broken washed side.
79.82	The corner of secs. 7, 8, I7 and I8.I75 ft.below mesa. Land broken and rolling. Soil, rocky, gravely and generally barren wash sides of draws, and ridges.Poor 4th,rate. Timber, scat.cedar and pinon.scrubby growth. Undergrowth, short and scat.sagebrush. Little grazing.

Subdivision of T.38 S.R.22 E.

Chains.	Thence I run
	N.89°51'W.on random line bet.secs 7 and 18.
40.00	Set temp. $\frac{1}{4}$ sec.cor.
78.15	Intersect the W.bdy.of the Tp.23 lks.S.of the cor.of secs. 7,12,13 and 18, heretofore described.
	Thence,S.89°41'E.on true line bet.secs. 7 and 18.
	Over broken mountainous land,draining SE.into Cottonwood creek.Desc.gradually.
25.00	W.edge of Cottonwood Canon.brs,N&S.Desc.abruptly,on E. slope ,150 ft.
31.00	Base of abrupt desc.N.and SE.grad.desc.
35.25	L.bank of Cottonwood Creek,water 1 ft.deep,60 lks.wide, Cse.South,8.00chs.thence SE.
38.15	Point for the $\frac{1}{4}$ sec.cor.falls in Cottonwood Creek.
39.00	L.bank of Cottonwood Creek,20 ft.high.On wash sand bank subject to being washed away by swift current in high water.
41.80	Begin ascent of steep W.side of canon,over broken surface, too steep or broken to set the $\frac{1}{4}$ sec.cor.
44.00	Set an iron post,3 ft.long,1 in.in dia.,24 ins.in a mound of stone and earth,on bed rock,for the witness corner for the $\frac{1}{4}$ sec.cor.with brass cap marked
	WC $\frac{1}{4}$ S 7 ✓ S 18 1912
	raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft.high,N.of the cor.
60.00	Gulch,dry,cse.Sw.
61.50	Small spring,of alkali water,drains SW.
78.15	The cor.of secs.7,8,17 and 18.
	Land,broken and mountainous.
	Soil,thin bad land washes and ridges,poor 4th,rate.
	Scattered clumps of Cottonwood trees on creek bank.
	May,22,1912.

Daniel B. Miller,
U.S. Surveyor.

Subdivision of T. 38 S., R 22 E.

Chains.

- N. 0° 07' E., bet. secs. 7 and 8.
 Desc. over rocky W. slope of mesa, over a series of ridges and ravines, covered with scattering scrub cedar timber.
 20.00 Dry draw, 50 lks. wide, 25 ft. deep, drains SW.
 30.00 Dry draw, 15 lks. wide, drains SW.: asc.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor. with brass cap mkd.

 $\frac{1}{4}$

S 7 | S 8 ✓

1912

- Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 58.00 Top of mesa; bears E. and W.; continue gradual asc; over rolling mesa, covered with scattering cedar timber.
 64.00 Top of gradual asc, bears N. 20° E. and S. 20° SW. 37 deg!
 68.00 Dry draw, 10 lks. wide, drains SE.; asc. gradually.
 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor of secs. 5, 6, 7, and 8, with brass cap mkd.

T 38 S R 23 E

S 6	S 5
S 7	S 8

1912

- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 Land rolling and broken.
 Soil, sandy loam and clay; 2nd and 4th rates.
Timber, scrub cedar.
 S. 89° 56' E., on a random line bet. secs. 5 and 8.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.85 Intersect the N. and S. line, 31 lks. S. of the cor. of secs. 4, 5, 8 and 9.
 Thence I run
 S. 89° 50' W., on a true line bet. secs. 5 and 8.
 Over gently rolling mesa, covered with sage brush under-growth and scattering scrub cedar timber.
 6.95 Fall 70 lks. N. of the SW. cor. of a desert entry claim,

Subdivision of T. 38 S., R. 22 E.

Chains.

Which is

A cedar post, 3 ins. in diam., 5 ft. above ground, firmly set, mkd. L K JONES OCT 10 1911.

21.80 Dry draw, 20 ft. deep, drains SW.

33.80 Dry draw, 20 lks. wide, drains S.

38.80 Dry draw, 20 lks. wide, drains S.

39.92¹ Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the grpund for the $\frac{1}{4}$ sec. cor., with brass cap, mkd.

$$\begin{array}{r} \frac{1}{4} \\ \text{S } 5 \\ \hline \text{S } 8 \end{array}$$

1912

From which

A cedar, 10 ins. in diam., bears N. $23^{\circ} 30'$ E., 76 lks. dist.; mkd. $\frac{1}{4}$ S 5 BT.

A cedar, 16 ins. in diam., bears S. $67^{\circ} 30'$ W., 21 lks. dist.; mkd. $\frac{1}{4}$ S 8 BT.

47.80 Dry draw, 20 lks. wide, drains S.

63.00 Dry draw, 20 lks. wide, drains S.

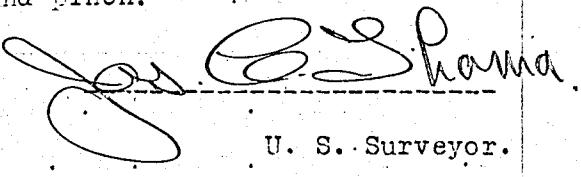
79.85 The cor. of secs. 5, 6, 7 and 8.

Land gently rolling.

Soil, sandy loam; 1 st rate.

Undergrowth, sagebrush. May 22, 1912.

Timber, scattering cedar and pinon.



U. S. Surveyor.

May 23; 1912: At 10h, a. m., 1. m. t., I set off $37^{\circ} 32'$ on the lat. arc, $20^{\circ} 37'$ N. on the decl. arc and determine a meridian with the solar at the cor. of secs. 5, 6, 7, and 8.

Thence I run

N. $89^{\circ} 41'$ W., on random linebet. secs. 6 and 7.

40.00 Set temp $\frac{1}{4}$ sec. cor.

78.21 Intersect the W. bdy. of the Twp. at the cor. of secs. 1, 6, 7, and 12, heretofore described.

Subdivision of T. 38 S., R. 22 E.

Chains	Thence I run S. $89^{\circ} 41'$ E., on true line bet. secs. 6 and 7. Descend.
7.00	R. bank of Cottonwood Creek, 20 ft. desc. over sand wash.
8.20	Enter stream, water 1 ft. deep, cse. S.
9.00	R. bank, leave stream, asc, bank 20 ft. high. Thence asc. broken E. side of canon.
38.31	Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in stone and earth; for the $\frac{1}{4}$ sec. cor. with brass cap mkd.
	$\frac{1}{4}$ S 6 — S 7
	1913
	Raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
	Continue steep asc.
43.20	Edge of mesa, brs. N. and S. Thence over rolling mesa, through dense cedar and pinion.
78.31	The cor. of secs. 5, 6, 7, and 8. Land rolling and broken. Soil, poor bad land in Canon. Fair sandy loam on mesa. Barren on canon sides, fair grazing on mesa.
May 23:	At this cor. at app. noon I set off $20^{\circ} 38'$ N. on the dec. arc, and observe the sun on the meridian, and obtain a lat. reading of $37^{\circ} 32'$ which is practically correct.
	Thence N. $0^{\circ} 07'$ E. on random line bet. secs. 5 and 6.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.45	Intersect the N. bdy. of the Twp. 2 lks. E. of the cor. of secs. 5, 6, 31 and 32, described in notes of ret. S. bdy. T. 37 S. R. 22 E., book "D" Thence, S. $0^{\circ} 06'$ W., bet. secs. 5 and 6 on true line. Over rolling mesa, through scrub cedar and pinion & short sagebrush.
13.00	Wash, dry, 6 lks. wide; cse. W.
28.50	Wash, 10 lks. wide, dry, cse. W.
36.50	Leave timber, E & W.
40.45	Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor. with brass cap mkd.

Subdivision of T. 38 S., R. 22 E.

Chains.

 $\frac{1}{4}$ S 6 | S 5

1912

Dig pits 18x18x12 ins. N. & S. of post 3 ft. dist. and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of the cor.

73.50 Leave sage brush and enter cedar & pinion, brs. E&W.

80.45 The cor. of secs. 5, 6, 7, and 8.

Land rolling.

Soil, sandy bench loam. Mostly 1st rate if irrigated.

Timber, scrub cedar and pinion.

Undergrowth, short sagebrush.

May 23, 1912.

Daniel B. Miller

U. S. Surveyor.

For certificate of assistants, see Book "V" of this Group.
For oaths of the U.S. Surveyors, see Book "W".

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Page

General description, T.38 S.R.22 E.

GENERAL DESCRIPTION.

This township is about one third rolling mesa covered with medium growth sagebrush, and clumps of scrub cedar and pinon of scrubby and medium growth along, and near the edges of the mesas.

The soil on the mesa land is of light sandy texture, and if irrigated would be 1st, rate agricultural land. Experiments in dry farming in the vicinity north of here, leads to the conclusion that this mesa land may raise fairly successful crops without irrigation.

There is fair to good grazing on the sage brush mesas, which are usually skirted by sandstone rim rock 10 to 50 ft. high, and several hundred feet above the draws, and canon valleys.

The canon space between the rim rock edges of the mesas, is usually broken, loose soil that washes easily, and is stony and mostly quite barren of vegetation of any value. There are scattered spots of small size in which a little grazing exists, on the level or rolling spaces.

There are two or three small springs in the township, go dry in late summer and fall. The water is more or less alkali in all.

The cedar and pinon is of scrubby growth, and very little fit for other use than fuel. A few fence posts may be cut but the supply is very limited.

Cottonwood and Recapture creeks, furnish quite a flow of water, except in the late summer and fall. Both have swift currents, and good reservoir sites may be found on each.

The sides of the canons on these streams are usually sandstone walls from a few feet high, to perpendicular heights of 150 ft. in some places.

There are numerous remains of prehistoric Cliff Dwellings along the canon walls of these streams, and some in good state of preservation.

Remains of sandstone walls projecting above the surface

General description, T. 38 S. R. 22 E.

along the mesa ridges, shows the occupancy of this country in past ages, and corn cobs to be found in the cliff ruins, shows that agriculture was pursued to some extent by the cliff and mesa dwellers.

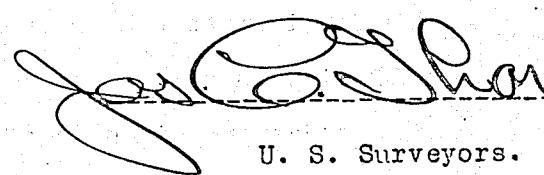
The latter buildings were usually built on the highest points of the mesa ridges.

There is no coalcroppings, or other mineral indications.

Some plowing in Sec. 3 has been done since the surveys were completed.

P. M. Shumway, has cultivated about two acres of land along the W. bank of Recapture Creek in Sec. 25, T. 38 S. R. 22 E., and Sec. 30, T. 38 S., R. 23 E., and built about $\frac{1}{4}$ mile of wire fence. The improvements amount to about \$350.00 including a road from the main Bluff-Grayson, County road, to his holdings, and a short irrigation ditch taking water out of Recapture Creek. About 500 ft. of dug way was necessary in the construction of the road. There are no buildings on his holdings. His post office address is Grayson.

Daniel B. Miller.



U. S. Surveyors.

FINAL OATH OF UNITED STATES SURVEYOR.

I, John D. Miller, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____.

For final oaths of U.S. Surveyors see book "V" T. 39 S., R. 26 E.

of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191_____. }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah June 2, 1912

The foregoing field notes of the survey of the Subdivisional lines of Township No. 38 South, Range No. 22 East of the Salt Lake Base and Meridian, Utah,

executed by Daniel B. Miller and Joseph C. Thomas
under my special instructions dated March 26, 1912, having
critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

J. C. Thomas
U. S. Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

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BOOK A-412

Filed Jul 1 1913

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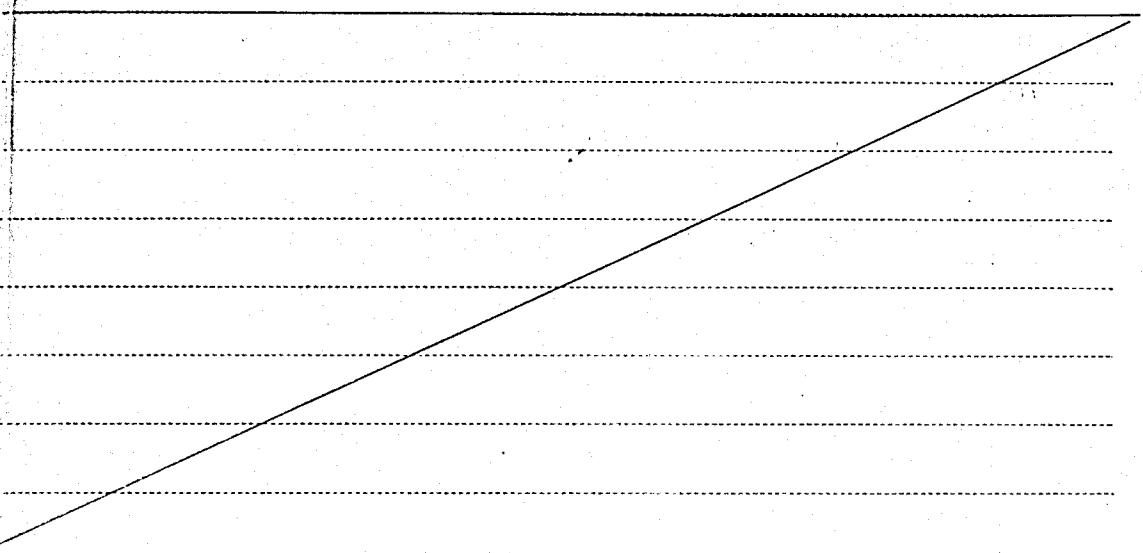
FIELD NOTES

OF THE SURVEY OF THE

NORTH AND EAST BOUNDARY AND THE

RETRACEMENT AND RESURVEY OF THE SOUTH BOUNDARY OF

T. 39 S., R. 23 E.



Of the Salt Lake Base and Meridian,

the State of UTAH

EXECUTED BY

Daniel B. Miller and Jos. C. Thoma

the capacity of U. S. Surveyor's, under instructions dated March 26, 1912,
ued by the United States Surveyor General to govern surveys included in
oup No. 16, which were approved by the Commissioner of the General Land
ice, April 2, 1912, pursuant to authority contained in the Act of
ngress dated , 1911.

Survey commenced May 24th, 1912.

Survey completed June 4th, 1912.

INDEX DIAGRAM.

Figure 2

Plate 2

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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Survey of T.39 S.R.23 E.

Survey commenced May 24th, 1912 and executed with a Keuffel & Esser Solar transit No. 20037, with solar attachment, the horizontal limb of which is provided with two double verniers reading to single minutes of arc, which is also the least count of the lat. and dec. arc verniers.

The instrument was examined and tested by me as Assistant Supervisor of Surveys, on the true meridian at Salt Lake City, January 22nd, 1912 and found in adjustment in all its parts.

May 24th, at my camp near the center of sec. 28, T.38, S.R. 23 E. at 4^h.30m.p.m.l.m.t. I set off 37°33' on the lat. arc and 20°52' N. on the dec. arc and determine the meridian with the solar, and note a small object in line therewith about $\frac{1}{2}$ mile N. of my station.

Before doing so, I examine the adjustments of the transit and correct the level and collimation errors.

Then to compare its indications resulting from solar observations during AM and PM hours, with a meridian determined by observation on Polaris, I proceed as follows.

May, 24; At 7h.25.5^mp.m.l.m.t. with the transit on the same point on which my p.m. solar observation was made, I make an hour angle observation by sighting Polaris west of the meridian, taking four sights. Two with the telescope in direct position and two in reversed position, noting a small object in line therewith in the mean position about $\frac{1}{2}$ mile to the N. and opposite the object sighted in my p.m. solar observation.

U.C. Polaris, May 24, Gran. 9h.20.3m. a.m.

Red. to lon. 109°26' I.2m.

L.W.T.U.C. 9h.19.1m. a.m.

Observation, l.m.t. 7h.25.5m. p.m.

Add, I2.

19h.25.5

Deducting time of U.C. 9h.19.1m.
Hour angle, 10h 06 4
Azimuth, 40.5

Survey of T.39 S.R.23 E.

May 24: At 8h.a.m.l.m.t. with my instrument standing over the same point, I turn off $0^{\circ}40'30''$ to the right, from my Polaris sight and find the meridian thus secured, hits the meridian secured from my solar observation by p.m. yesterday.

At 8h.15m.a.m.l.m.t. on the same point, I set off $37^{\circ}29'$ on the lat.arc; $20^{\circ}48'N.$ on the decl.arc and find the mer. hitting the same object in line with the other meridians. I therefore conclude that the solar attachments are in satisfactory adjustment.

During the progress of the surveys of the exterior and subdivisional lines in this township, I made frequent tests, on this meridian of the solar apparatus, and kept my watch set at all times within one minute of local mean time.

RETRACEMENT S. BDY. OF T.39 S., R.23 E.

Preliminary to the survey of this township I retrace the S.bdy., beginning at the established corner of Tpa.39 & 40 S., Rgs.22 and 23 E., which is a sandstone $8 \times 10 \times 24$ ins., firmly set, and marked and witnessed as described by the surveyor general.

May 25: At this corner I set off $37^{\circ}28'30''$ on the lat.arc, and $21^{\circ}01'N.$ on the decl.arc, at 1:30 p.m., l.m.t., and determine a meridian with the solar.

Thence I run

Foot on S.bdy. of sec.31,

40.00 No 4 corner could be found.

86.30 Fall 21 lbs.N. of the corner of secs.5,6,31, and 32, which is a sandstone $6 \times 8 \times 10$ ins., loosely set, marked and witnessed as described by the surveyor general.

May 25, 1912.

Retracement of the S.Boundary of T.39 S., R.23 E.

Chains. May 27, 1912: At the corner of secs.5,6,31 and 32, here-tofore described, I set off $37^{\circ} 22' 30''$ on the lat. arc, and $31^{\circ} 20' N.$ on the decl.arc, at 10.30 a.m.l.m.t. determine a meridian with the solar.

Thence E.on S.bdy.of sec.32,

40.00 No $\frac{1}{4}$ corner could be found.

79.67 Fall 19 lks.S.of the corner of secs.4,5,33, and 33, a cross marked on the sandstone ledge. Mound of stcne N.

From this corner I run E.on S.bdy.of sec.33,

39.23 Fall 8 lks.S.of traces of old mound.

40.00 No $\frac{1}{4}$ cor.could be found.

79.37 Fall 12 lks.S.of the corner of secs.3,4,33, and 34, a sandstone 11 x 10 x 12 ins.in mound of stone. Md.of stone W.of the corner.

From this corner I run E.on S.bdy.of sec.34,

40.00 No trace of the $\frac{1}{4}$ corner could be found.

79.98 Fall 14 lks.S.of the corner of secs.2,3,34, and 35, a sandstone 14 x 8 x 10 ins.in mound of stone. Mound of stone N.of the corner.

May 27: At this cor.at apparent noon I set off $21^{\circ} 21' N.$ on the decl.arc, and observe the sun on the meridian; the resulting lat.is $37^{\circ} 22' 30''$, the proper lat.

From the corner last described I run

East on S.bdy.of sec.35

39.82 Intersect the old $\frac{1}{4}$ sec.cor., which is a sandstone 5 x 10 x 12 ins.above ground, in mound of stone, showing trace of $\frac{1}{4}$ mark.

79.82 Fall 3 lks.N.of the corner of secs.1,2,35, and 36, a

Retracement of the S. Boundary of T.39 S., R.23 E.

Chains.

sandstone 10 x 5 x 8 ins. above ground, firmly set, marked and witnessed as described by the surveyor general.

May 27, 1912.

May 28: At 8 a.m.l.m.t., at the corner of secs. 1, 2, 35 & 36 heretofore described, I set off $37^{\circ} 22' 30''$ on the lat.arc, and $21^{\circ} 29' N.$ on the décl.arc; and determine a meridian with the solar.

Thence east on S.bdy.of sec.36,

40.00 No 4 corner could be found.

80.00 Fall 3 lbs.S. of the cor.of Tps.39 & 40 S., Rs.23 and 24 E., a sandstone 6 x 10 x 20 ins. loose in ground, marked and witnessed as described by the surveyor general.

I reset the corner firmly in the ground, 14 ins., the sides showing 6 notches on the S.F. and N.faces.

S. $69^{\circ} 59' W.$ on true line betsecs.1 and 36,

40.00 Set a sandstone 16 x 8 x 16 ins., 18 ins.in the ground marked $\frac{1}{4}$ on the N.face, for re-established $\frac{1}{4}$ sec.cor. Raise a mound of stone $2\frac{1}{2}$ ft.base, 2 ft.high N.of cor. Pits impracticable.

80.00 Intersect the cor.of secs.1,2,35, and 36.

N. $69^{\circ} 57' W.$ on true line betsecs.2 and 35,

40.00 Set a sandstone 16 x 6 x 5 ins.in mound of stone,firmlly marked $\frac{1}{4}$ on N.face, for re-established corner, in place of old corner; raise a mound of stone $2\frac{1}{2}$ ft. base 2 ft.high N.of cor. Thence West

79.82 Intersect the corner of secs.2,3,34, and 35.

May 28: At this corner I set off $37^{\circ} 22' 30''$ on the lat.arc; $21^{\circ} 31' N.$ on the décl.arc at 2h 0m p.m.l.m.t. and determine a meridian with the solar.

Retracement of the S.Boundary of T.39 S., R.23 E.

Chains.

S. $89^{\circ}54'W$.on true line bet.secs.3 and 34,

- 39.99 Set a sandstone 18 x 10 x 8 ins., 12 ins.in the ground, for re-established $\frac{1}{4}$ sec.cor., marked $\frac{1}{4}$ on N.face;raise a mound of stone 3 ft.base, $1\frac{1}{2}$ ft.high N.of cor.
- 79.98 Intersect the corner of secs.3,4,33, and 34.

May 28, 1912.

RESURVEY.

June 4, 1912: At the cor.of secs.3,4,33, and 34, at 9h a.m.l.m.t., I set off $37^{\circ}22'30''$ on the lat.arc; $22^{\circ}27'30''$ N.on the decl.arc; and determine a meridian with the solar. Thence I run, S. $89^{\circ}55'W$.on S.bdy.of sec.33,

Over broken land; through scattering shadscale.

- 1.00 Left bank of McCracken Wash, 3.ft.high, bears N. and S.
- 7.90 Right bank of McCracken Wash, 3 ft.high, bears N. and S.
- 40.00 Set a sandstone 14x5x17 ins., 12 ins.in the ground,for $\frac{1}{4}$ sec.cor., marked $\frac{1}{4}$ on N.face; raise a mound of stone $2\frac{1}{2}$ ft.base, 3 ft.high N.of cor.
- 60.00 Wash, 10 lks.wide, 10 ft.deep, course SE.Descend gradually.
- 79.87 The cor.of secs.4,5,32, and 33.
- Steep descent over breaks. Thence N. $89^{\circ}53'W$.
- 80.00 Set a sandstone 20x12x10.ins., 15 ins.in the ground,supported by mound cf stone firmly built,for cor.of secs.32 and 33, marked with 2 notches on W.and 4 on E.edges; for raise a mound of stone $2\frac{1}{2}$ ft.base, 2 ft.high W.of cor.
- Point marked on sandstone ledge now refers to secs.4 and 5 only.
- Land, broken canon slope.
- Soil, bad land and stony;4th rate.
- No vegetation, except very scattered shadscale.
- Note: It was impracticable to use iron posts for the $\frac{1}{4}$ sec.or sec.corners.

S. $89^{\circ}52'W$.on S.bdy.of sec.32,

Over broken bad land surface.

5.00 Canon wash, 30 lks.wide, course SE.

Resurvey of the South Boundary of T.39 S., R.23 E.

Chains.	
8.00	Point of sharp spur, slopes SE. Descend.
12.00	Canon wash, 25 lks. wide, course SE.
22.00	Top of low ridge, bears NW. and SE. Descend abruptly 100 ft.
27.00	Bottom of deep wash. Asc. steep E.slope.
35.00	Top of steep ridge, sloping to SE.
40.00	Set a sandstone 30 x 16 x 10 ins. 22 ins. in the ground and mound of stone, for $\frac{1}{4}$ sec.cor., marked $\frac{1}{4}$ on N.face; raise a mound of stone $2\frac{1}{2}$ ft. base, 2 ft. high N.of cor. Impracticable to set iron post corner.
	June 4: At this corner, at apparent noon, I set off 22° 28'N.on the decl.arc; and observe the sun on the meridian; the resulting lat.is 37°22'30", the proper lat.
	From $\frac{1}{4}$ cor.the ascent becomes steep and badly broken.
✓ 79.04	The corner of secs.5,6,31 and 32. I efface the marks on the NE.bearing tree, and rebuild the mound of stone. This corner now refers to secs.5 and 6 only.Thence N.89°51'W.
79.50	The top of canon rim, 400.ft.above the canon valley of Montezuma Cr.Thence over nearly level mesa; through scattering cedar and pinon pine.
80.00	Set a sandstone 30 x 16 x 10 ins. 22 ins. in mound of earth and stone, for cor.of secs.31 and 32, marked with 1 notch on W.and 5.notches on E.edges;raise a mound of stone $2\frac{1}{2}$ ft. base, 2 ft. high N.of cor.Corner set on solid bedrock. Land, badly broken with deep washes;immense bodies of broken sandstone fallen off the cliffs. Soil, alluvial and bad lands; 4th rate. No vegetation except few scattering cedar and pinon pine. Impracticable to set iron post corner.
	N.89°51'W.on S.bdy.of sec.31,
	Over rolling mesa;through scattering cedar and pinon pine.
22.00	Edge of mesa,bearing NW. and S.I.ace Over perpendicular sandstone ledge, 60 ft. high.Thence steep descent over deep washes and sharp ridges of bad land surface.
40.00	Set a sandstone 18x10x6 ins., 12 ins. in mound of earth and stone,for $\frac{1}{4}$ cor.of sec.31,mkd. $\frac{1}{4}$ on N.face;raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft high N.of cor. Impracticable to set iron post cor.

16

Resurvey of part of the S. Bdy. of T. 39 S., R. 23 E.

Chains 76.00	Foot of steep desc., 500 ft. below top of mesa. Over rolling surface.						
79.34	The cor. of townships. 39 and 40 S., Rgs. 23 and 23 E. Land rolling mesa, scat. cedar & onion, 22.00 chs. Steep mountain breaks, 54.00 chs. Rolling open surface, 4.34 chs. Soil 2nd to 4th rate. No vegetation except on high mesa.						
	. June 4th, 1912.						
	At this cor. I set off $37^{\circ} 22' 30''$ on the lat. arc, $22^{\circ} 29'$ N. on the decl. arc at 3 p. m., l. m. t. and determine a meridian with the solar, finding the same to correspond with the lines just run by me.						
	 <hr/> <p style="text-align: center;">SURVEY OF THE EAST BOUNDARY OF T. 39 S., R. 23 E. From the cor. of Tps. 39 and 40 S., Rgs. 23 and 24 E., I run North, on the range line bet. T. 39 S., Rgs. 23 and 24 E. May 28, 1912, At 1:30 p. m., l. m. t., I set off $37^{\circ} 22' 30''$ on the lat. arc, $21^{\circ} 31'$ N. on the decl. arc at the cor. of Tps. 39 and 40 S., Rgs. 23 and 24 E. and determine a meridian with the solar. Thence, I run North, bet. secs. 31 and 36. Over broken and hilly surface. Asc. gradually. Thru. sagebrush. Low ridge, bears NE. and SW. Desc. grad. Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor. with brass cap md. <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center; padding-right: 10px;">$\frac{1}{4}$</td> <td style="border-left: 1px solid black; border-bottom: 1px solid black; padding-right: 10px;">S 36</td> <td style="border-left: 1px solid black; border-bottom: 1px solid black; padding-right: 10px;">S 31</td> </tr> <tr> <td></td> <td colspan="2" style="text-align: center;">1912</td> </tr> </table> Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Small drain, ose. SE. Enter very scat. cedars. Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in mound of stone on bed rock cor the cor. of secs. 25, 30, 31 and 36, with brass cap md.</p>	$\frac{1}{4}$	S 36	S 31		1912	
$\frac{1}{4}$	S 36	S 31					
	1912						

East Boundary of T. 39 S., R. 23 E.

Chaine.

T. 39 S
R. 23 E | R. 24 E
S 25 | S 30
S 36 | S 31

1912.

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land rolling and hilly.

Soil, generally exposed wash surface, 3rd and 4th rates.

Scattered cedar 27.00 chs. Scat. sage brush.

May 28, 1912.

Daniel B. Miller

U. S. Surveyor.

Survey commenced May 24, 1912, and executed with a
Young & Sons light mountain transit No. 8146, with solar
attachment, the description of which appears in Book
No. 1 of this survey.

To compare its indications resulting from solar observations made during a. m. and p. m. hours, with a meridian determined by observation on Polaris, I proceed as follows:

May 24th: At my camp near the centre of sec. 34, T. 38 S., R. 23 E., I set off $37^{\circ} 29'$ N. on the lat. arc, $20^{\circ} 51'$ N. on the decl. arc, and determine with the solar a meridian and mark a point in line thereof on a stake driven about 10 chs. N. of my station.

May 24: I observe Polaris as follows:

U. C. of Pol. May 24, at GR. 9h20.3 a.m.

Red. to long. $109^{\circ}26' W.$ 1.2

U. C. of Pol. at sta. cf obsn. 9h19.1

16

East boundary of T. 39 S., R. 23 E.

Chains.

Angle W., flag to star, $0^{\circ} 40' 00''$
W. Az. of Pol. at time of obsn. . . . $0^{\circ} 39' 00''$
Flag bears N. $0^{\circ} 01' 00''$ W.

May 24, 1912.

May 25: At 7h 57m a. m., l. m. t. I set off $37^{\circ} 29' N.$
on the lat. arc, $20^{\circ} 58' 30'' N.$ on the decl. arc, and
at the same astronomical station, determine with the
solar a meridian, the line of which falls $\frac{1}{2}$ inch to the
W. of the point as established by my p. m. solar of
yesterday.

May 25: The Special Instructions governing the survey of
the N. and E. boundaries of T. 39 S., R. 23 E. were not
strictly adhered to in the survey of the boundaries in question.
The location of the cor. of Tps. 38 and 39
S., Rgs. 23 & 24 E. not being known, and to search for it
would cause delay and additional expense; I proceed to
the cor. of Tps. 38 and 39 S., Rgs. 22 and 23 E., and
run East on a random line along the N. bdy. of T. 39 S.,
R. 23 E., allowing for convergency and setting temp. $\frac{1}{4}$
sec, and sec. cors. at intervals of 40 and 80 chs., and
at 478.90 chs. established the temp. cor. of Tps. 38 and
39 S., Rgs. 23 and 24 E., on May 27.

May 28: At the temp. cor. of Tps. 38 and 39 S., Rgs. 23
and 24 E., I set off $37^{\circ} 28' N.$ on the lat. arc, $21^{\circ} 30' N.$
on the decl. arc, and at 7h 57m a. m., l. m. t.,
determine the meridian with the solar.

Thence I run

South on a random line bet. Rgs. 23 and 24 E., setting
temp $\frac{1}{4}$ and sec. cors. at intervals of 40 and 80 chs., and
400.26, fall 26 lks. W. of the cor. of secs. 25, 30,
31 and 36, T. 39 S., Rgs. 23 and 24 E. From this cor.
I run North, on a true line bet. secs. 25 and 30.

Asc. over rolling mesa, covered with scattering scrub
cedar timber, and sage brush undergrowth.

- 8.00 Top of asc., bears E. and W.; desc.
- 10.00 Leave scattering scrub cedar timber, bears NE. and SW.;
continue over gently rolling open mesa.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in

East Boundary of T. 39 S., R. 23 E.

Chains.	in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.	
	$\frac{1}{4}$	S 35 | S 30
	1912	
Dig pits, 18x18x12 ins. N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.		
44.00	Dry draw, 10 lks. wide, drains E.	
80.00	Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground for the cor. of secs. 19, 24, 25 and 30, with brass cap mkd.	
	$T \ 39 \ S$	
	R 23 E | R 24 E	
	S 24 | S 19	
	<hr/>	
	S 25 | S 30	
	1912	
Dig pits, 18x18x12 ins., in each sec., $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.		
Land, rolling.		
Soil, sandy loam, 1st rate.		
Undergrowth, sagebrush.		
Good grazing land. Scattering scrub cedar on 10.00 chs.		
Thence North on true line bet. secs. 19 and 24.		
Over rolling mesa covered with sage brush and buck thorn undergrowth.		
19.00	Dry draw, 10 lks. wide, drains E.	
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.	
	$\frac{1}{4}$	S 24 | S 19
	1912	
Dig pits, 18x18x12 ins., N. and S. of post, 3 ft. diat.; and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.		
57.00	Ridge bears NE. and SW.	
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 13, 18, 19 and 24, with brass cap mkd.	

. East Boundary of T.39 S., R.23 E.

Chains.

	T 39 S
R 23 E	R 24 E
S 13	S 18
S 24	S 19
	1912

Dig pits 18 x 18 x 12 ins.in each sec., 5 $\frac{1}{2}$ ft.dist.; and raise a mound of earth 4 ft.base, 2 ft.high W.of cor.
Land, rolling.

Soil, sandy loam; 1st rate.

Undergrowth, sage and buck thorn.

Good grazing. No timber.

Thence North, betsecs.13 and 18,

Over rolling mesa, covered with sagebrush and buck thorn.
Ridge, bears NW. and SE.

Set an iron post, 3 ft.long, 1 in.in diam., 24 ins.in
the ground, for the $\frac{1}{4}$ sec.cor., with brass cap mkd.

$\frac{1}{4}$	
S 13	S 18
1912	

Dig pits 18 x 18 x 12 ins.N.and S.cf post, 3 ft.dist.;
raise a mound of earth 3 $\frac{1}{2}$ ft.base, 1 $\frac{1}{2}$ ft.high W.of cor.

Set an iron post 3 ft.long, 3 ins.in diam., 24 ins.in
the ground, for the cor.of secs.7,12,13, and 18, with
brass cap mkd.

	T 39 S
P 23 E	R 24 E
S 12	S 7
S 13	S 18
	1912

Dig pits 18 x 18 x 12 ins.in each sec., 5 $\frac{1}{2}$ ft.dist.; and
raise a mound of earth 4 ft.base, 2 ft.high W.of cor.

Land, rolling.

Soil, sandy loam; 1st rate.

Undergrowth, sagebrush and buckthorn.

Good grazing. No timber.

Thence North, betsecs.7 and 12,

Over rolling land covered with sagebrush and buckthorn
undergrowth.

East Boundary of T.39 S., R.23 E.

Chains.

40.00 Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec.cor., with brass cap mkd.

$\frac{1}{4}$	
S 12	S 7
1912	

80.00

Dig pits 18 x 18 x 12 ins. N. and S. of post, 3 ft. dist.; raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor. Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for the cor. of secs. 1, 6, 7, and 12, with brass cap mkd.

T 39 S	
R 23 E | R 24 E	
S 1 | S 6	
S 12 | S 7	
1912	

Dig pits 18 x 18 x 12 ins. in each sec. $5\frac{1}{2}$ ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high W. of cor. Land, rolling. Soil, sandy loam; 1st rate. Undergrwth, sagebrush and buckthorn. Good grazing. No timber.

32.00

Thence North bet. secs. 1 and 6,

40.00

Over gently rolling land, covered with sagebrush and buckthorn undergrowth.

Bluff-Dolores road, bears E. and W.

40.00

Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec.cor., with brass cap mkd.

$\frac{1}{4}$	
S 1	S 6
1912	

80.00

Dig pits 18 x 18 x 12 ins. N. and S. of post, 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor. Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for the cor. of Tps. 38 and 39 S., Rgs. 23 and 24 E., with brass cap mkd.

T 38 S	
R 23 E | R 24 E	
S 36 | S 31	
S 1 | S 6	
T 39 S	
1912	

Dig rts 24x24x12 ins. on each line N.E., and W. 4 ft. dist. and S. of post 8 ft. dist.; and raise a mound of earth 5 ft. base $2\frac{1}{2}$ ft. high S. of cor.

169

North Boundary of T. 39 S., R. 23 E.

Chains.

This cor. falls 26 lks. E. of temp. Tp. cor., and 26 lks. S. Therefore, the N. bdy. of the T. bears N. $89^{\circ} 58'$ W. Land, gently rolling.

Soil, sandy loam; 1st rate.

Good grazing. Undergrowth, sage brush and buck thorn.

No timber.

May 28, 1912.

May 29: At 8h 57m a. m., l. m. t., L set off $37^{\circ} 28'$ N. on the lat. arc, $21^{\circ} 39'$ N. on the decl. arc, and at the cor. of Tps/ 38 and 39 S., Rgs. 23 and 24 E., determine the meridian with the solar.

Thence, I run

N. $89^{\circ} 58'$ W., on true line bet. secs. 1 and 36.

Over rolling mesa, covered with sage brush undergrowth.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 36

S 1
1912

Dig pits, 18x18x12 ins., E. and W. of post, 3 ft. diat.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

47.00 Dry draw, 10 lks. wide, drains SW.

50.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 1, 2, 35 and 36, with brass cap mkd.

T 38 S R 23 E

S 35	S 36
S 2	S 1
T 39 S	
1912	

Dig pits, 18x18x12 ins., in each sec., $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, sandy loam; 1 st rate.

Good grazing. No timber. Sage brush undergrowth.

Thence I run

N. $89^{\circ} 58'$ W., on a true line bet. secs. 2 and 35.

Over rolling mesa, covered with sage brush undergrowth.

North Boundary of T. 39 S., R. 23 E.

- Chains.
- 12.00 Dry draw, 10 lks. wide, drains SW.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
 $\frac{1}{4}$
S 35

S 2
1912.
- Dig pits, 18x18x12 ins., E. and W., of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 72.00 Bluff- Dolores Road, bears N. 60° W., and S. 60° E.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 2, 3, 34 and 35, with brass cap mkd.
- | | | | |
|--------|-----|------|---|
| T 38 | S | R 23 | E |
| S 34 | | S 35 | |
| <hr/> | | | |
| S 3 | S 2 | | |
| T 39 S | | | |
| 1912 | | | |
- Dig pits, 18x18x12 ins., in each sec., $5\frac{1}{2}$ ft. dist.; and raise a mound of earth $4\frac{1}{2}$ ft. base, $2\frac{1}{2}$ ft. high, W. of cor.
- Land, rolling.
- Soil, sandy loam; 1st rate.
- Good grazing. No timber.
-
- Thence I run
- N. $89^\circ 58'$ W., on a true line bet. secs. 3 and 34.
- Over rolling land, covered with sage brush undergrowth.
- 7.00 Dry draw, 10 lks. wide, drains NW.
- 33.00 Dry draw, 10 lks. wide, drains SW.
- 37.00 Dry draw, 10 lks. wide, drains SW.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
 $\frac{1}{4}$
S 34

S 3
1912.
- Dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist.;

North Boundary of T. 39 S., R. 23 E.

Chains.

and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high,
N. of cor.

- 54.00 Enter scattering scrub cedar timber bease, NE. and SW.
57.00 Dry draw, 10 lks. wide, drains SW.
65.00 Mesa ruins, N. 2 chs.
80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in
the ground for the cor. of secs. 3, 4, 33 and 34, with
brass cap mkd.

T 38	S	R 23 E
S 33		S 34

S 4	S 3	
T 39 S		
1912		

Dig pits, 18x18x12 ins., in each sec., $5\frac{1}{2}$ ft. dist.; and
raise a mound of earth, 4 ft. base, 3 ft. high, W. of
cor.

Land, rolling.

Soil, sandy loam; 1 st rate.

Good grazing. No timber.

May 29: At 11h 57m, a. m., l. m. t., I set off $21^{\circ} 40' N.$
on the defl. rac, and at the cor. of secs. 3, 4, 33 and
34, observe the sun on the meridian, the resulting lat.
is $37^{\circ} 28' N.$

Thence I run

N. $89^{\circ} 58'$ W., on true line bet. secs. 4 and 33.

Over rolling land, covered with sage brush undergrowth.

- 15.00 Dry draw, drains N.
23.00 Enterscattering scrub cedar timber, bears NE. and SW.
24.00 Dry draw, 10 lks. wide, drains N.
30.00 Dry draw, 10 lks. wide, drains N.
40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec cor., with brass cap mkd.

S 33

S 4
1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

- 56.00 Enter dense scrub cedar timber, bears N. and S.
62.00 Rim rock, 30 ft. high, bears N. and S., leave gently rolling

North Boundary of T. 38 S., R. 23 E.

Chains. mesa, desc. abruptly over broken W. slope of same.

- 20.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in
in the ground for the cor. of secs. 4, 5, 32 and 33,
with brass cap mkd.

T 38	S R 23 E
S 32	S 33
<hr/>	
S 5	S 4
T 39 S	
1912	

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land rolling in the E. $\frac{1}{2}$ and broken in the W. $\frac{1}{2}$; soil

Soil; sandy loam and adobe; 1st and 4th rates.

Good grazing. Timber, scrub cedar.

Thence I run

N. $89^{\circ} 58'$ W., on a true line bet. secs. 5 and 32.

Desc. gradually over rolling land, 100 ft. below top of
mesa, with a scant growth of shad scale.

- 4.00 Bluff-Dolores Road, bears NE. and SW.

- 17.00 Dry drw, 20 lks. wide, drains SW.

- 39.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the
ground for the witness cor. to the $\frac{1}{4}$ sec. cor., with
brass cap mkd.

$\frac{1}{4}$	
S 33	
<hr/>	
S 5	
WC	
1912	

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

- 40.00 The middle of Horse Creek. A dry wash, 1 ch. wide, 5 ft.
deep, drains SW.; asc. gradually. $\frac{1}{4}$ sec.cor.not set..

- 41.50 Start abrupt asc. over broken SE. slope of point of mesa,
bears NE. and SW.

- 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in
the ground for the cor. of secs. 5, 6, 31 and 32, with
brass cap mkd.

T 38	S R 23 E
S 31	S 32
<hr/>	
S 6	S 5
T 39 S	
1912	

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land rolling.

North Boundary of T. 39 S., R. 23 E.

Chains

Soil, sandy loam, 1st rate, 40.00 chs.; adobe and stony, 4th rate, 40.00 chs.

No timber.

- Thence N. run
N. 89° 58' W.; on true line bet. secs. 6 and 31.
Asc. over E. slope of mesa, over a series of ridges and ravines.
Rim rock; 50 ft. high, bears NE. and SW.
7.00 Edge of point of mesa, bears NE. and SW.; enter scattering scrub cedar timber.
15.00 W. edge of point of mesa, bears NW. and SE.; desc. abruptly.
26.00 Bottom of canon, 200 ft. below top of mesa, drains S.; asc.
39.00 E. edge of point of mesa, 200 ft. above bottom of canon, bears N. and S.
40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{2}$ sec. cor., with brass cap mkd.

S 31

S 6

1912

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

59.00 W. edge of point of mesa, bears NW. and SE.; desc. over rocky W. slope.

72.00 Foot of abrupt desc., 300 ft. below top of mesa, bears N. and S., continue over rolling bottom land.

79.16 The cor. of Tps. 38 and 39 S., Rgs. 22 and 23 E. Land, mountainous.

Soil, sandy loam on mesas, 1st rate; adobe and stony on slopes; 4th rate.

Good grazing.

Timber, scattering scrub cedar.

Boundaries of T. 39 S., R. 23 E.

Latitudes, Departures and Closing Errors.

Latitudes Departures

Lines Designated	True Bearing	Dist. Chs.	N. Chs.	S. Chs.	E. Chs.	W. Chs.
So. Bdy.	S.89°59'W.	80.00	.....	.....02	.....	80.00
So. Bdy.	N.89°59'W.	79.82	....02	.....	.....	79.82
So. Bdy.	S.89°54'W.	79.98	.....	.....14	.....	79.98
So. Bdy.	S.89°55'W.	80.00	.....	.....12	.....	80.00
So. Bdy.	S.89°52'W.	80.00	.....	.....19	.....	80.00
So. Bdy.	N.89°51'W.	79.34	....21	.....	.....	79.34
Colo. G. M.	North	480.00	480.00	.....	.....	.....
No. Bdy.	S.89°58'E.	479.16	.....	....28	479.16	.....
E. Bdy.	South	480.00	.....	480.00	.....	.....
	Convergency	.....	.....	.....	.....55	.....

Totals	480.23	480.75	479.71	479.14
	480.23	479.14		

Error in lat. and dep. .52 :57

Jos. C. Shreve

U. S. Surveyor.

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, _____, U. S. Surveyor, during the periods and in the capacities _____, at opposite our several signatures, in surveying all those parts or portions of _____.

For certificate of assistants see book "V" T.39 S., R.26 E.

the Meridian, in the State of _____

which are represented in the foregoing field notes as having been executed by him, and under his direction; and that said survey has been, in all respects, to the best of our knowledge and belief, well and faithfully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	

Subscribed and certified to before me on the dates of the final service as shown above.

U. S. Surveyor.

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oaths of U. S. Surveyors see book N. T. 39 S., R. 26 E.

of the _____
Meridian, in the State of _____, which are represented
the foregoing field notes as having been executed by me, and under my direction; and I do further
solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that
the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191_____ }

SEAL

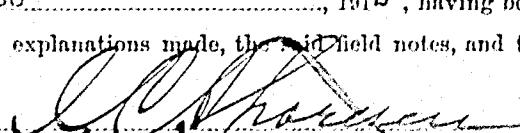
APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

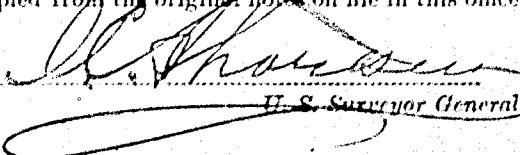
Salt Lake City, Utah, February 7, 1912

The foregoing field notes of the survey of the North and East boundaries, and retracement and resurvey of the South boundary of Township No. 39 Sc. 26, Range 23 East of the Salt Lake Meridian, Utah,

executed by Daniel P. Miller and Joseph C. Thomas
under his special instructions dated March 26, 1912, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and the
and retracments and resurveys surveys they describe, are hereby approved.


U. S. Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.


U. S. Surveyor General

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BOOK R-412

Filed Jul 1 1913

ER

FIELD NOTES

OF THE SURVEY OF THE

S U B D I V I S I O N A L L I N E S O F

T. 39 S., R. 23 E.

Of the Salt Lake Base and Meridian,

In the State of U. T. A. H.

EXECUTED BY

Daniel B. Miller and Jos. C. Thomas

In the capacity of U. S. Surveyors, under instructions dated March 26, 1912,

and by the United States Surveyor General to govern surveys included in

Prop. No. 16, which were approved by the Commissioner of the General Land

Office April 2, 1912.

Survey commenced May 28th, 1912.

Survey completed June 18th, 1912.

BOOK A-412

INDEX DIAGRAM.

Township Range

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Subdivision of T.39 S., R.23 E.

Chains.

Survey commenced May 28, 1912, and executed with the instrument described in book "A" of this survey. For test of instrument also see book "A".

May 28: At the cor. of secs. 1, 2, 35, and 36 on S.bdy. of Tp. heretofore described, at 2h 30m p.m. l.m.t., I set off $37^{\circ}22'30''$ on the lat.arc; $21^{\circ}31'N.$ on the decl.arc; and determine a meridian with the solar.

Thence I run N.0° 01'W. bet. secs. 35 and 36,

N.0° 01'W. bet. secs. 35 and 36,

Over open rolling mesa; through scattering sagebrush.

40.00

Set an iron post 3 ft. long, 1 in. dia., 24 ins. in the ground, for $\frac{1}{4}$ sec.cor., with brass cap marked

S 35	$\frac{1}{4}$	S 36
1912		

dig pits 18x18x12 ins. N. and S. of post 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.

64.00

Top of low ridge. Gradual descent.

80.00

Set an iron post 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 25, 26, 35, and 36, with brass cap marked

T 39 N	R 23 E
S 26	S 25
S 35	S 36

1912

dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.

Land, rolling, slight slope to N. & E.

Soil, light sandy texture; if irrigated, 1st class.

Scattering sagebrush. No timber.

N. $89^{\circ}59'E.$ on random line bet. secs. 35 and 36,

40.00

Set temp. $\frac{1}{4}$ sec.cor.

80.07

Intersect the E.bdy. of the Tp. 21 lks. S. of the cor. of secs. 25, 30, 31, and 36, heretofore described. Thence I run

S. $89^{\circ}50'W.$ on true line bet. secs. 25 and 36,

Over slightly rolling surface; gradually ascending, open sagebrush; scattering cedars.

Subdivision of T.39 S., R.23 E.

Chains.

7.50 Small wash, 10 lks. wide, drains SE. Leave cedars.

40.03 $\frac{1}{2}$ Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground, for $\frac{1}{4}$ sec.cor., with brass cap marked

$\frac{1}{4}$
S 25
S 36
1912

and dig pits 18 x 18 x 12 ins. E. and W. of post 3 ft. dist.
and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.

68.00

Low ridge, bears NW. & SE.

80.07

The cor. of secs. 25, 26, 35, and 36.

Land, slightly rolling.

Soil, loose sandy texture; 1st class, if irrigated.

Short growth of sagebrush. Scattering cedars 7.00 ohs.

Fair grazing.

N.0° 01' W. bet. secs. 25 and 26,

Over slightly rolling surface, draining W.; short sagebrush

40.00

Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground, for $\frac{1}{4}$ sec.cor., with brass cap marked

S 26	$\frac{1}{4}$	S 25
1912		

from which

A scrub cedar 15 ins. diam. bears N.30° 30' E. 170 lks.
dist., marked $\frac{1}{4}$ S 25 B T

A scrub cedar 6 ins. diam. bears N.65° W. 48 lks. dist.
marked $\frac{1}{4}$ S 26 B T

80.00

Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 23, 24, 25, and 26, with brass cap marked

T 39	S	R 23	E.
S 23		S 24	
S 26		S 25	
1912			

dig pits 18 x 18 x 12 ins. in each sec. $5\frac{1}{2}$ ft. dist.; and
raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
Land, gently rolling; open sagebrush mesa.

Soil, loose sandy loam; 1st class if under irrigation.

Fair grazing.
Scattered, scattering cedar.

May 28th, 1912.

Subdivision of T.39 S.R.23 E.

hains.

May 29, At 9h.30m.a.m.l.m.t.I set off $37^{\circ}24'$ on the lat. arc and $21^{\circ}39'$ N.on the dec.arc, and determine a meridian at the corner of secs.23,24,25 and 26.

Thence I run

N. $89^{\circ}50'$ E on random line betsecs.24 and 25.

0.00 Set temp. $\frac{1}{2}$ sec.cor.

0.06 Intersect the E.bdy of the township.35 lks.N.of the cor.of secs.19,24,25, and 30, heretofore described.

Thence I run

N. $89^{\circ}55'$ W.on true line betsecs.24 and 25.

Over rolling mesa,draining SE.

0.00 Top of low ridge,N. & S.grad.desc.

0.03 Set an iron post 3 ft.long,I in.in diam.,24 ins. in the ground for $\frac{1}{2}$ sec.cor.with brass caps mkd.

S	24
S	25

1912.

Dig pits 18 X 18 X 12 ins.,E & W of the post,3 ft.dist. and raise a mound of earth $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft.high N.of cor.

.06 The corner of secs.23,24,25, and 26.

Land gently rolling sagebrush mesa.

Soil loose sandy loam.If irrigated,Ist.class.

Good grazing.No timber.

N. $0^{\circ}1'$ W.betsecs.23 and 24

Over gently rolling sagebrush mesa.

7.00 Foundation of prehistoric mesa ruin,about 4.00chs.E.of line

0.00 Set an iron post 3 ft.long,I in.in diam.,24 ins in the ground,for $\frac{1}{2}$ sec.cor.with brass cap marked

S 23	S 24
------	------

1912

raise a mound of stone 2 ft.base $1\frac{1}{2}$ ft.high W.of cor.

0.00 Set an iron post 3 ft.long,2 ins.in diam.,24 ins.in the ground for cor.of secs.13,14,23, and 24 with brass cap marked

T 39 S	R 23 E
S 14	S 13
S 23	S 24

1912.

Subdivision of T.59 S.R. 25 E.

Chains.

dig pits, 18 X 18 X 12 ins. in each sec. 5 $\frac{1}{2}$ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high W. of cor. Land slightly rolling, open sagebrush mesa. Soil, loose sandy loam. If irrigated, 1st. class. Good grazing. Short bunch grass in patches. No timber. From this point the E. tip of Bears Ear brs. N. 59° 17' W.

S. 89° 55' E. on random line bet. secs. I3 and 24.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.08 Intersect the E. bdy. of township I7 lks. N. of the corner of secs. I3, I8, I9, and 24, heretofore described. Thence I run N. 89° 48' W. on true line bet secs. I3 and 24. Over rolling mesa, draining SE.

Gradual ascent, over thick gth. of sagebrush.

40.04 Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground for $\frac{1}{4}$ sec. cor. with brass cap marked.

$\frac{1}{4}$	
S I3	
S 24	

I9I2.

dig pits 18 X 18 X 12 ins. E. & W. of post 3 ft. dist.; and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.

80.08 The corner of secs. I3, I4, 23, and 24.

Land gently rolling, sagebrush mesa.

Soil loose sandy loam. 1st. class if irrigated.

No timber. Good grazing.

N. 6° 1' W. bet secs. I3 and I4.

Over rolling sagebrush mesa, draining S.W.

40.00 Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground for $\frac{1}{4}$ sec. cor. with brass cap marked

$\frac{1}{4}$	
S I4	
S I3	

I9I2.

dig pits 18 X 18 X 12 ins. N. & S. of post, 3 ft. dist.; and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins in the ground for the corner of secs. II, I2, I3 and I4 with

(5)

Subdivision of T.39 S.R.23 E.

brass cap marked

T 39 S	R 23 E
S II	S I2
<hr/>	
S I4	S I3

I9I2

and dig pits 18 X 18 X 12 ins, in each sec. $5\frac{1}{2}$ ft. dist. and raise a mound of earth, 4 ft. base, $2\frac{1}{2}$ ft. high W. of cor.

Land gently rolling, open sagebrush mesa.

Soil, loose sandy loam. 1st. class if irrigated.

No timber. Good grazing.

May 29:

At this corner at apparent noon I set off $21^{\circ}40'$ N. on the dec. arc and observe the sun. on the meridian. The reading of the lat. arc is $37^{\circ}26'$ which agrees with other data.

Thence I run

S. $89^{\circ}48'$ E. on random line bet. secs. I2 and I3.

0.00 Set temp $\frac{1}{4}$ sec. cor.

0.15 Intersect the E. bdy. of the township, 4 lks. S. of the cor. of secs. 7, I2, I3 and I8, heretofore described.

Thence I run

N. $89^{\circ}50'$ W. on true line bet. secs. I2 and I3

Over open rolling mesa, draining to the E. through sagebsh.

0.00 Low ridge N. & S. grad. desc. W.

0.07 Set an iron post 3 ft. long, 1 ins. in diam., $2\frac{1}{4}$ ins in the ground for $\frac{1}{4}$ sec. cor. with brass cap marked

$\frac{1}{4}$	N
S I2	
<hr/>	
S I3	

I9I2

dig pits 18 X 18 X 12 ins. E. & W. of post 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.

0.15 The corner of secs. II, I2, I3, and I4.

Land open gently rolling sagebrush mesa.

Soil loose sandy loam. 1st. class if undr. irrigation.

No timber. Good grazing.

Subdivision of T.39 S.R.23 E.

Chains.

- May 29, at 3h.p.m.l.m.t. I set off $37^{\circ}26'$ on the lat.arc
 $21^{\circ}41'$ N.on the dec.arc and determine a meridian with the
solar at the corner of secs.II,I2,I3, and I4.
Thence I run
N. $0^{\circ}1'$ W.bet secs.II and I2.
Over open rolling sagebrush mesa,draining S.W. An Occasional scrub cedar.
- 16.50 Small wash,near head.Cse.S.W.
- 40.00 Set an iron post 3 ft.long, 1 in.in diam.,24 ins.in the ground for $\frac{1}{4}$ sec.cor.marked
- | | | |
|---------------|-------|------|
| $\frac{1}{2}$ | S II | S I2 |
| | 1912. | |
- raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high,W.of cor.
No trees within limits for marking.Leave scat.cedar.
- 45.00 McCracken Wash,10 lks.wide near head.cse.S.W.Asc.grad.
- 56.00 Remains of a prehistoric mesa ruin on ridge,about 300 lks.W.of line.
- 80.00 Set an iron post,3 ft.long,2 ins.in diam.,24 ins.in the ground for corner of secs.I,2,II, and I2 with brass cap marked
- | | |
|--------|--------|
| T 39 S | R 23 E |
| S 2 | S I |
| S II | S I2 |
- 1912
- and raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of cor.
Land gently rolling sagebrush mesa.
Soil loose sandy loam.If irrigated,1st.class.
Timber,an occasional scrub cedar the S.40.00 chs.
Good grazing.
- May 29th,1912.
-
- June 3;at 3h.p.m.l.m.t I set off $37^{\circ}27'$ on the lat.arc
 $22^{\circ}21'$ N.on the dec.arc and determine a meridian at the corner of secs.I,2,II & I2.
Thence I run
S. $89^{\circ}50'$ E.on random line betsecs.I and I2.
- 40.00 Set temp $\frac{1}{4}$ sec. cor.
- 80.26 Intersect the E.bdy of the Tp.at the cor.of secs.I,6,7 heretofore described.

Subdivision of T.39 S.R.23 E.

- Thence I run N. $89^{\circ}50'$ W.on true line bet.secs.I and I2.
 Over open rolling sagebrush mesa,
 35.00 Low ridge,N.& S.gentle desc.to W.& S.W.
 40.13 Set an iron post 3 ft.long,I ins.in dia.,24 ins.in the
 ground for $\frac{1}{2}$ sec.cor.with brass cap marked

$$\begin{array}{c} \frac{1}{4} \\ \text{S I} \\ \hline \text{S I2} \end{array}$$

I9I2

- dig pits 18 X 18 X 12 ins.E.& W.of post 3 ft.dist.;and
 raise a mound of earth $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft.high N.of cor.
 60.26 The corner of secs.I,2,II, and I2.
 Land slightly rolling sagebrush mesa.
 Soil,loose sandy loam.Ist,class if under irrigation.
 No timber.Good grazing.

- Thence I run N. $0^{\circ}1'$ W.on random line bet secs.I and 2.
 0.00 Set temp $\frac{1}{4}$ sec.cor.
 9.64 Intersect the N.bdy of the Tp.30 lks.W.of the cor.of secs.
 I,2,35, and 36, heretofore described.
 Thence I run
 S. $0^{\circ}12'$ W..on true line bet secs.I and 2.
 Over slightly rolling ,open mesa,of short sagebrush.
 .00 Wagon road between Bluff,Utah, and Dolores,Colorado,E. and W.
 .64 Set an iron post 3 ft.long,I in.in dia.,24 ins.in the
 ground,for $\frac{1}{2}$ sec.cor.with a brass cap marked

$$\begin{array}{c} \frac{1}{4} \text{S 2} | \text{S I} \\ \hline \text{I9I2} \end{array}$$

- dig pits,18 X 18 X 12 ins N.& S.of post 3 ft.dist.and
 raise a mound of earth, $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft.high w.of the cor.
 2.00 Wash, 10 lks. wide, drs. SW.; asc. grad.
 9.64 The corner of secs.I,2,II and I2.
 Land,open rolling sagebrush mesa.
 Soil,loose sandy loam.Ist.class if irrigated.
 No timber.Cood grazing,of short bunch grass in patches.

June 3rd..1912.

Daniel B. Miller

U.S.Surveyor

Subdivision of T.39.S.R.23 E.

Chains.	May 31st. at 1h.30m.p.m.l.m.t. I set off $37^{\circ}22'30''$ on the lat.arc; $21^{\circ}58'$ N. on the dec.arc and determine a meridian with the solar at the corner of secs. 2, 3, 34 & 35 on the S.bdy of the Tp., heretofore described.
	Thence I run
	N. $0^{\circ}1'W.$ bet. secs. 34 and 35.
	Over steep ascent of S.mesa rim, across deep badland washes, ascending 300 ft. to top of mesa rim E. & W.
14.00	Top of perpendicular ledge at S.side of mesa. Over exposed bed rock & thin soil gradually descending.
23.50	Head of canon wash draws N.E. Desc. over very broken bad land breaks.
40.00	Set an iron post 3 ft. long, 1 ins. in diam., 24 ins. in the ground for $\frac{1}{4}$ sec.cor. with brass cap marked
	$\frac{1}{4}$ S 34 | S 35
	I912
	raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
47.50	Deep draw drains E. An Alkali Spring 2 chs. E. of line. From draw, asc. along rocky S.E. slope.
57.00	Sharp point of mesa projects from the S.W. Desc. 200 ft.
75.00	Foot of spur, N.E. Over rolling surface.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 26, 27, 34, and 35 with brass cap marked
	T 39 S. | R 23 E S 27 | S 26 ---+--- S 34 | S 35
	I912
	and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Land, all canon sides, washes and barren bad lands, except 9.50 chs. on the mesa top, which is exposed bed rock and thin sandy soil supporting a scat. gth. of short sagebrush. Soil 2nd. to 4th. rate.
	Very little vegetation on mesa.
	Scant grazing. No timber.

Subdivision of T.39 S.R.23 E.

- bains.
- Thence I run
S.89°59'E.on random line bet secs.26 and 35.
- 10.00 Set temp $\frac{1}{4}$ sec.cor.
- 19.76 Intersect N.& S.line 12 lks.N.of the cor.of secs.25,26,35, and 36.
- Thence I run
N.89°54'W.on true line betsecs.26 and 35.
Over rolling mesa,An occasioasl scrub cedar.
- 1.50 W.edge of mesa,over ledge N.& S.Desc.200 ft.descending wash,bare surface of mesa sides.
- 3.00 Point of spur from S.
- 9.88 Set an iron post 3 ft.long,1 in.in diam.,24 ins.in the ground for $\frac{1}{4}$ sec.cor.with brass cap marked
- $$\begin{array}{r} S\ 26 \\ \hline S\ 35 \end{array}$$
- 1912
- raise a mound of stone 2 ft.tanc 1 $\frac{1}{2}$ ft.high N.of the cor.
- 0.60 Canon wash 25 lks wide,cse N.
- 9.00 Low spur from S.W.slopes N.
- 9.76 The corner of secs.26,27,34, and 35.
Land,East 21.50 chs, on sagebrush mesa, gently rolling.
The 4.57.70 chs.badly broken canon bad lands.
Soil,2nd, and 4th, class.
An occasional scrub cedar on mesa.No timber in canon.
Fair grazing on mesa,scant grazing near the last corner.
-
- Thence I run
N.0°I'W.bet.secs.26 and 27.
Over rolling land broken surface in E arm of canon.
- 25 Canon wash 30 lks wide,cse.N.E.
- 00 Wash 20 lks.wide,cse.N.W.
- 00 Point for corner falls in wash 20 lks.wide cse.W.Cor.not set.
- 00 set an iron post 3 ft.long,1 in.in diam.,24 ins,in the ground,for witness corner to $\frac{1}{4}$ sec.cor. with brass cap marked,

Subdivision of T.39 S.R.23 E.

Chains.

W.C.	$\frac{1}{4}$	✓
S 27		S 26

1912

Raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor.

50.00 Begin steep ascent over N side of canon, over large sandstone boulders.

67.00 S. edge of mesa, at top of perpendicular ledge 50 ft. high. 200 ft. above the canon valley. Grad. desc. over broken mesa surface, through scat. cedars.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for the cor. of secs. 22, 23, 26, and 27 with brass cap marked

T 39 S	R 23 E
S 22	S 23
S 27	S 26

1912

and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Land, Open broken canon washes, mostly bare bad land, the south 67.00 chs. The N. 13.00 is broken mesa.

Soil, exposed wash surface, rocky & stony ridges, 4th, class.

A scattered growth of cedar, on mesa.

Very scant grazing.

May 31st, 1912.

June 1st. at 7h 30m. a.m. l.m.t. I set off $37^{\circ}24'$ On the lat. arc, $22^{\circ}05'$ N. on the dec. arc and determine a meridian with the solar at the corner of secs. 22, 23, 26 and 27. Thence S. $89^{\circ}54'$ E. on random line bet. secs. 23 & 26.

40.00 Set temp $\frac{1}{4}$ sec. cor.

79.72 Intersect the N. & S. line, 21 lks. S of the cor. of secs. 23, 24, 25 and 26.

Thence I run S. $89^{\circ}57'$ W. on true line bet. secs. 23 and 26. Over broken surface of sandstone & sandy ridges, draining S.W. Grad. desc. over short sagebrush.

23.25 Edge of mesa brs. N.E. & S.W. Over ledge, 50 ft.

29.70 Canon wash, 150 ft. below mesa. cse. SW.

Old cliff ruins N. of this point, about 7.00 chs.

Subdivision of T.39 S.R.23 E.

- Ascend steep S.E.slope over broken ledges, 125 ft.
- 65.70 E.edge of mesa, brs.N. & S.W. Grad asc. over mesa.
- 69.86 Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the ground, for $\frac{1}{4}$ sec.cor. with brass cap marked.
- $\frac{1}{4}$
S 23
S 26
- I9I2
- raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N.of cor.
- 9.70 An old cliff ruin, about 6.00 chs. S.of line.
- 4.72 A small spring, about 5.00 chs. S.of line, drains N.
- 9.72 The corner of secs. 22, 23, 26, and 27.
- Land, E. 23.25 chs, rough broken mesa. The W. 56.47 chs.
broken wash and adobe.
- Soil, 3rd, & 4th, class.
- An occasional scrub cedar on mesa.
- Little vegetation in canon valley. Scant grazing.

- Thence I run
- N.0° I' W. bet secs. 22 and 23.
- Across mesa point. Through scat cedar.
- 3.75 Edge of mesa, brs. E. & W. Descend abruptly, 300 ft.
- 3.25 Head of gulch Cse. S.W. Asc.
- 7.75 Top of S.edge of mesa, brs. W. & S.E. 200 ft. above gulch.
Across mesa point.
- 0.00 Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec.cor. with brass cap marked
- $\frac{1}{4}$ S 22 | S 23
- I9I2
- raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W.of cor.
- June 1:
At this corner at 11h.58m.l.m.t. I set off 22°05' N. on the dec.arc and observe the sun on the meridian. The reading of the lat.arc is found to be 37°25'.
- 6.00 N.edge of mesa point, brs. "E. & S.W. Descend abruptly, 75 ft.
- 0.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for the corner of secs. 14, 15, 22 and 23 with brass

(18)
Subdivision of T.39 S.R.23 E.

Chains.

cap marked

T 39 S	R. 23 E
S 15	S 14
S 22	S 23

1912.

and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of corner.

From the corner, a Scrub Cedar, 10 ins. in dia., S. 45° W.

15 lks. Mkd. T 39 S R 23 E S 23 B T No other trees within limits.

Land broken. Canon surface, 66.75. Mesa surface, 13.25 chs.

Soil, 2nd. to 4th. rate.

Very scattered Cedar on mesas.

Scant grazing.

Thence I. run

N. 89° 57' E. on random line bet. secs. I4 and 23.

40.00 Set temp $\frac{1}{2}$ sec. cor.

79.82 Intersect the N. & S. line 2 lks S of the corner of secs.

I3, I4, 23 and 24

Thence, S. 89° 56' W. on true line bet. secs. I4 and 23.

Over rolling mesa, draining to N.W. Open sagebrush surface

39.91 Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground, for $\frac{1}{2}$ sec. cor. with brass cap marked

$\frac{1}{2}$	✓
S	I4
<hr/>	
S 23	

1912

dig pits 18 X 18 X 12 ins. E. & W. of post, 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.

43.80 Leave sagebrush, enter scrub cedar. Exposed bed rock.

72.80 Old cliff ruins on line N. S. about 4.00 chs. Descend over ledges from mesa.

80.00 The corner of secs. I4, I5, 22 and 23.

Land broken and rolling.

Soil bed rock and loose sandy formation. 2nd. to 4th. class.

Scat. scrub cedar 36.00 chs. Short sagebrush 43.80, chs.

Fair grazing.

210

Subdivision of T.39 S.R.23 E.

hains.

Thence I run

N.0°I'W.bet.secs.I4 and I5.

Over broken surface through scrub cedar, scattered.

6.00 McCracken Wash, 30 lks.wide,cse.S.W. Asc.steep rocky S.E. slope, 100 ft.to

15.00 Top of steep ascent, brs.E.& W.Grad.desc.

40.00 Set an iron post 3 ft.long, 1 ins.in dia., 24 ins.in the ground for $\frac{1}{4}$ sec.cor.with brass cap marked

$\frac{1}{4}$	S I5	S I4
---------------	------	------

I9I2

raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft. high W.of cor.

No trees in distance suitable for marking.

From this corner, several old cliff ruins in good state of preservation, br .N.67°I5' E.about 16.00 chs.

0.00 Set an iron post, 3 ft.long, 2 ins.dia., 24 ins.in the ground for the cor.of secs.I0,II,I4 and I5 with brass cap marked

T 39 S	R 23 E
S I0	S II
S I5	S I4

I9I2

and raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft. high W of cor.

A scrub cedar, 6 ins.dia., S.I4°30' W.56 lks.

Marked, T 39 S R 23 E S I5 B T

No other trees suitable in limits.

Land,broken & rolling.

Soil,adobe wash surface and stony.2nd.to 4th.rate,

Scant grazing.Timber,an occasional scrub cedar.

Thence I run

N.89°56'E.on random line bet.secs.II and I4.

0.00 Set temp. $\frac{1}{4}$ sec.cor.

9.8I Intersect the N.& S.line 2 lks.N of the cor.of secs.II. I2,I3 and I4.

Thence S.89°57'W.on true line bet.secs.II and I4.

Through scat.cedars, and short sagebrush.

June 1:

At this cor.at 3h.p.m.l.m.t.I set off 37°26' on the lat.

Subdivision of T 39 S.R.23 E.

Chains.	arc and $22^{\circ}07'$ N.on the dec.arc, and determine the meridian with the solar.
24.80	Enter scat.cedars N.& S..
31.50	McCracken Wash, 30 lks.wide, 20 ft.deep.Cse.S. 35° W.Ascend.
39.90	Set an iron post 3 ft.long, 1 in.in dia., 24 ins in the ground for $\frac{1}{4}$ sec.cor.with brass cap marked $\frac{1}{4}$ S II S I4 I9I2 raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high N.of cor. No trees suitable for marking. Continue gradual ascent, over broken surface.
79.81	The corner of secs.I0,II,I4 and I5. Land broken and rolling. Soil, rocky and sandy in places.2nd.to 4th,rate. Scat.scrub cedars, 55.00 chs.Short sagebrush 79.8Ichs. Grazing fair.
	Thence I run N. $0^{\circ}1'$ W.betsecs.I0 and II. Over rolling sagebrush mesa, in scat.cedars. 30.00 Leave scat cedars.E & S.W.Over open sagebrush surface. 40.00 Set an iron post 3 ft.long, 1 in.in dia., 24 ins.in the ground, for $\frac{1}{4}$ sec.cor.with brass cap marked $\frac{1}{4}$ S IO | S II I9I2 dig pits 18 X 18 X 12 ins.N.& S.of post, 3 ft.dist.; and raise a mound of earth $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft. high W of corner. 80.00 Set an iron post, 3 ft.long, 2 ins.in dia., 24 ins.in the ground for the corner of secs.2,3,I0 and II.with brass cap marked T 39 S | R 23 E S 3 | S 2 S IO | S II I9I2

Subdivision of T.39 S.R.23 E.

dig pits in each sec. I8 X I8 X I2 ins. $5\frac{1}{2}$ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high W. of cor. Land, slightly rolling. Soil, dark sandy loam. June 1st, 1912. Good grazing. Scat. scrub cedar & pinon.

June 3rd, at 8: a.m. l.m.t. at the corner of secs. 2, 3, IO and II, I set off $37^{\circ}27'$ on the lat arc, $22^{\circ}20'00''$ N. on the dec. arc and determine a meridian with the solar. Thence I run $N.89^{\circ}57'$ E. on random line bet. secs. 2 and II. Set temp. $\frac{1}{4}$ sec. cor.

Intersect the N. & S line, 3 lks. N. of the cor. of secs. I. 2, II and I2.

Thence I run,

$S.89^{\circ}58'W.$ on true line bet secs. 2 and II.

Over rolling mesa, short sagebrush.

Wash. Cse. S. $35^{\circ}W.$

Set an iron post 3 ft. long, 1 in. in diam., 24 ins in the ground for $\frac{1}{4}$ sec. cor. with brass cap marked:

$\frac{1}{4} S 2$
S II

1912

dig pits I8 X I8 X I2 ins. E. & W. of the post, 3 ft. dist. and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of the corner.

The corner of secs. 2, 3, IO and II.

Land open rolling sagebrush mesa.

Soil, dark sandy loam. Ist class if irrigated.

No timber. Short gth. sagebrush.

Good grazing.

Thence I run

$N.0^{\circ}1'W.$ bet. secs. 2 and 3. on random line.

Set temp. $\frac{1}{4}$ sec. cor.

Intersect the N. bdy. of the Tp. 6 lks. W. of the corner of Secs. 2, 3, 34 and 35, heretofore described.

Thence $S.0^{\circ}2'W.$ on true line, bet. secs. 2 and 3.

Over open slightly rolling mesa, through short sagebrush.

Subdivision of T.39 S.R.23 E.

Chains. 39.64	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for $\frac{1}{4}$ sec. cor. with brass cap marked $\frac{1}{4} S 3 | S 2$ 1912 dig pits 18 X 18X12 ins. N. & S. of post, 3 ft. dist. and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor. The corner of secs. 2, 3, 10 and 11. Land, gently rolling open sagebrush mesa. Loo Soil, loose sandy loam. 1st class if irrigated Good grazing. Bunch grass in patches. No timber.
79.64	June 3rd, 1912. <i>Daniel B. Miller,</i> U.S. Surveyor.
	Note: for test of instrument, see Book of boundaries of this township.
	May 31: At 9h 27m, a. m., l. m. t., I set off $37^{\circ} 22' 3''$ N. on the lat. arc; $21^{\circ} 57'$ N. on the decl. arc, and at the cor. of secs. 3, 4, 33 and 34, on S.bdy. of Tp. heretofore described] determine a meridian with the so N. $0^{\circ} 02'$ W., bet. secs. 33 and 34. Asc. over W. slope of mesa, over a series of ridges and ravines, through shad scale undergrowth.
5.00	Top of low slope of mesa, bears W.; desc.
7.00	Bottom of desc., bears NE. and SW., continue over level sand flat.
13.00	Dry draw, 20 lks. wide, drains W.; asc. over broken W. slope.
18.00	Top of ass., bears E. and W.; desc.
28.00	Bottom of desc., bears E. and W.; continue over level sand flat.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
	$\frac{1}{4} $ S 33 S 34 1912

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Subdivision of T. 39 S., R. 23 E.

- Chains. Raise a mound of stone, 3 ft. base $1\frac{1}{2}$ ft. high, W. of cor.
- 46.00 Start asc. over steep, rocky S. slope.
- 51.00 Top of ridge, bears E. and W.
- 56.00 Start desc. over a series of ridges and ravines.
- 67.00 McCracken Wash, 50 lks. wide, 20 lks. deep, dry, drains SW.; asc over rocky S. slope.
- 72.00 Top of asc., bears E. and W. desc.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins in the ground, for the cor. of secs. 37, 28, 33 and 34, with brass cap mkd.

T 39 S R 23 E	
S. 28	S 37
<hr/>	
S 33	S 34

1912

Raise a mound of stone, 3 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Soil, sandy on the flats; volcanic and stony on ridges and slopes. No timber. Shadscale undergrowth.

May 31: At 11h. 57m; a. m., 1. m. t., I set off $21^{\circ} 57' 30''$ N. on the decl. arc, and at the cor. of secs. 37, 38, 33 and 34, observe the sun on the meridian, the resulting lat. is $37^{\circ} 23' N.$

Thence I run

N. $89^{\circ} 54'$ E., on a random line bet. secs. 37 and 34.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

20.14 Intersect the N. and S. line at the cor. of secs. 36, 27, 34 and 35.

Thence I run

S. $89^{\circ} 54'$ W., on true line bet. secs. 37 and 34.

Desc. over broken land, covered with shad scale under-growth.

7.50 Dry draw, 20 lks. wide, drains NW.; asc.

22.00 Top of asc., bears N. and S.; desc. Gradually.

40.07 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S. 27
<hr/>
S 34

1912

Subdivision of T. 39 S., R. 23 E.

Chains.

- Raise a mound of stone, 3 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 72.00 McCracken Wash, 50 iks. wide, 20 iks. deep, dry, drains SW.; asc. abruptly over broken NE. slope.
- 80.14 The cor. of secs. 27, 28, 33 and 34.
Land rolling.
Soil, volcanic and rocky; 4th rate.
Scant grazing. No timber. Shadscale undergrowth.
-

Thence I run

N. $0^{\circ} 02'$ W., bet. secs. 27 and 28.Asc. over rocky, broken S. slope of mesa, bears E. and W.,
Covered with scattering scrub cedar timber.

- 30.00 Abrupt asc. over a series of rim rock, bears E. and W.
- 37.00 S. edge of McCracken Mesa, bears E. and W., continue over level mesa through scattering scrub cedar timber.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S 28	S 27
1913	

Raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

- 68.00 Dry draw, 30 iks. wide, drains SE.

- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins in the ground for the cor. of secs. 21, 22, 27 and 28, with brass cap mkd.

T 39 S R 23 E
S 21 | S 22
S 22 | S 27

1913

Raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Land, broken and level on the mesa, 1st and 4th rates.
Soil, volcanic on slopes and sandy loam on the mesa.
Timber, scattering scrub cedar. May 31, 1913.

June 1: At Sh 27M, a. m., 1. m. t., I set off $37^{\circ} 24'$ N. on the lat. arc, $22^{\circ} 05'$ N. on the decl. arc, and at the cor. of secs. 21, 22, 27 and 28, determine the meridian with the solar.

Subdivision of T. 39 S., R. 23 E.

Chains.

Thence I run

N. $89^{\circ} 54'$ E., on a random line bet. secs. 22 and 27.40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.33 Intersect the N. and S. line 2 lks. S. of the cor. of secs. 22, 23, 26 and 27.

Thence, S. $89^{\circ} 53'$ W., on a true line bet. secs. 22 and 27.

Over broken land, covered with scattering scrub cedar timber.

12.30 Leave scattering scrub cedar timber, bears N. and SE.

16.30 Rim rock, 40 ft. high, desc. abruptly over W. slope of mesa, bears N. and S.

24.35 Bottom of abrupt desc., bears N. and S.

40.16 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S 22

S 27
1912

raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

44.00 Cut bank of McCracken Wash, 30 ft. deep, Course S.

46.00 Middle of McCracken Wash.

67.80 Dry draw, 30 lks. wide, 20 ft. deep, course S.

80.32 The cor. of secs. 21, 22 27 and 28.

Land, broken. Soil, volcanic and rocky. Timber, scattering scrub cedar

June 1: At 11h 58m, a. m., l. m. t., I set off $22^{\circ} 06'$ N. on the decl. arc, and at the cor. of secs. 21, 22, 27 and 28, observe the sun on the meridian, the resulting lat. is $37^{\circ} 24'$ N.

Thence I run

N. $0^{\circ} 02'$ W., bet. secs. 21 and 22.

Over rolling mesa, covered with shad scale undergrowth.

8.00 Dry, draw, 30 lks. wide, drains W.; asc. over slope of mesa over a series of ridges and ravines.

30.00 Enter scattering scrub cedar timber, bears NW. and SE.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

Subdivision of T. 39 S., R. 23 E.

Chains.

$\frac{1}{4}$	S 21	S 22
1912		

- Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 42.00 Dry draw, 20 lks. wide, drains E.; asc.
 76.00 Top of point of mesa, bears NE. and SW. (McCracken Mesa).
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in
 the ground for the cor. of secs. 15, 16, 21 and 22, with
 brass cap mkd.

T 39	S	R 23 E
S 16	S 15	
S 21	S 22	
1912		

- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 Land, rolling.
 Soil, sandy loam; 2nd rate.
 Timber, scrub cedar.

Thence I run

N. $89^{\circ} 53'$ E., on a random line, bet. secs. 15 and 22.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.37 Intersect the N. and S. line, 12 lks. S. of the cor. of
 secs., 14, 15, 22 and 23.
 Thence, S. $89^{\circ} 48'$ W., on a true line bet. secs. 15 and 22.
 Over rolling mesa land, covered with scattering scrub cedar
 4.00 McCracken Wash, drains SW.
 8.30 Dry draw, 20 lks. wide, drains S.
 18.30 Dry draw, 20 lks. wide, drains S.
 20.00 Start abrupt asc., bears N. and S.
 29.30 Top of abrupt asc., bears N. and S., continue over level
 mesa land.

- 32.00 Cliff ruins, bear N. 2 chs.
 35.00 Hollow drains SE.
 40.185 Set an iron post; 3 ft. long, 1 in. in diam., 24 ins. in the
 ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	S 15	
S 22		
1912		

- Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
 75.00 Ascent bears NE. and SW., over McCracken Mesa.

Subdivision of T. 39 S., R. 23 E.

Chains 80.37	The cor. of secs. 15,16,21 and 22. Land broken and rolling. Soil, sandy loam and adobe; 2nd and 4th rates. Timber, scattering scrub cedar.
	N. $0^{\circ}02'W.$ bet. secs. 15 and 16. Over rolling mesa, covered with scattering scrub cedar timber and greasewood undergrowth.
39.00	Dry draw, 20 lks. wide, drains SE.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor. with brass cap mkd.
	$\frac{1}{4}$ S 16 | S 15 1912
	Dig pits $18 \times 18 \times 12$ ins. N. and S. of post, 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
66.00	Dry draw, 10 lks. wide, drains W. Asc.
69.00	Top of asc., bears E. and W. Desc. gradually.
71.00	Dry draw, 10 lks. wide, drains W.
75.00	Dry draw, 30 lks. wide, drains W.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 9,10,15 and 16, with brass cap mkd.
	T 39 S R 23 E S 9 | S 10 S 16 | S 15 1912
	Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Land, rolling. Soil, sandy loam, 3rd rate. Timber, scattering scrub cedar. Greasewood undergrowth.
	June 1, 1912.
June 3:	At 8h.28m a.m., 1.m.t., I set off $37^{\circ}26'N.$ on the lat. arc. $22^{\circ}20'30''N.$ on the decl. arc. and at the cor. of secs. 9,10,15 and 16, determine the meridian with the solar. Thence I run N. $89^{\circ}48'E.$ on a random line bet. secs. 10 and 15.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.27	Intersect the N. and S. line 9 lks. N. of the cor. of

Subdivision of T. 39 S., R. 23 E.

Chains

- secs. 10,11,14 and 15. Thence I run
S. $89^{\circ}52'W$. on true line bet. secs. 10 and 15.
Desc. over rolling mesa, covered with scattering scrub
cedar timber and sage brush undergrowth.
- 40.135 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor. with brass cap mkd.

 $\frac{1}{4}$
S 10
S 15
 1912
- Dig pits 18x18x12 ins. E. and W. of post, 3 ft. dist.
and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high
N. of cor.
- 51.20 Dry draw, 10 lks. wide, drains SE.
- 69.00 Dry draw, 20 lks. wide, drains SW.
- 78.00 Dry draw, 10 lks. wide, drains S.
- 80.27 The cor. of secs. 9, 10, 15 and 16.
Land, rolling mesa.
Soil, sandy loam, 1st. rate.
Timber, scattering scrub cedar.
Sagebrush undergrowth.

Thence I run

N. $0^{\circ}02'W$. bet. secs. 9 and 10.Over rolling mesa, covered with scattering scrub cedar
timber and sagebrush undergrowth.

- 4.00 Edge of mesa, bears E. and W.
Desc. over broken NW. slope.
- 6.00 Dry draw, 10 lks. wide, drains NW. Asc.
- 9.00 Top of spur of mesa, projects W. Desc.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor. with brass cap marked

$\frac{1}{4}$	S 10
S 9	

 1912

Subdivision of T. 39 S., R. 23 E.

Chains.

- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 41.00 Desc. over SE. slope of canon, over a series of ridges and ravines, bears NE. and SW.
 58.00 Bottom of desc., bears E. and W.; asc.
 69.00 Edge of mesa, bears NW. and SE., continue over nearly level mesa land. (McCracken Mesa.)
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor of secs. 3, 4, 9 and 10, with brass cap mkd.

T 39 S R 23 E

S 4	S 3
S 9	S 10

1912

Dig pits, 18x18x12 ins., in each sec. $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, $3\frac{1}{2}$ ft. high, W. of cor. Land, rolling.

Soil, sandy loam on mesa; adobe and stony on slopes; 1st and 4th rates. Timber, scattering scrub cedar. Sagebrush undergrowth.

June 3: At 11h 58m, a. m., l. m. t., I set off $22^{\circ} 21'$ N. on the decl. arc, and at the cor. of secs. 3, 4, 9 and 10, observe the sun on the meridian, the resulting lat. is $37^{\circ} 27'$ N.

Thence I run

N. $89^{\circ} 52'$ E., on a random line bet. secs. 3 and 10.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.36 Intersect the N. and S. line 2 lks. N. of the cor. of secs. 2, 3, 10 and 11.

Thence, S. $89^{\circ} 53'$ W. on true line bet. secs. 3 and 10.

Over rolling mesa land covered with sage brush undergrowth.

30.30 Enter scattering scrub cedar timber, bears NW. and SE.

40.18 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 3
S 10

1912

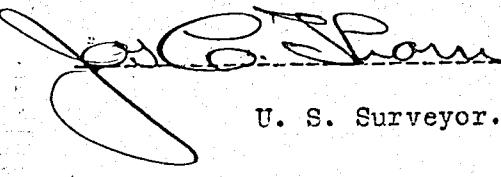
Dig pits 18x18x12 ins., E. and W. of post, 3 ft. dist.; and

Note: Feb. 3, 1951. This monument reported by shell oil co. Engs. to be found loose and out of position. G.W.S.

Subdivision of T. 39 S., R. 23 E.

Chains	raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
52.00	Dry draw, 10 lks. wide, drains S.
80.36	The cor. of secs. 3, 4, 9 and 10. Land rolling. Undergrowth, sagebrush. Soil, sandy loam; 2nd rate. Timber, scattering scrub cedar.
	Thence I run N. $0^{\circ} 02'$ W., on a random line bet. secs. 3 and 4.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.86	Fall 44 lks. W. of the cor. of secs. 3, 4, 33 and 34. on N.bdy.of Tp., heretofore described. Thence S. $0^{\circ} 17'$ W., on a true line bet. secs. 3 and 4. Over broken mesa land covered with scattering scrub cedar timber and sage brush undergrowth.
20.00	Enter scattering scrub cedar timber, bears NW. and SE.
39.00	Dry draw, 10 lks. wide, drains E.
39.86	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
	S 4 | S 3 1912
	Dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
59.00	Asc., over rim rock, 30 ft. high, bears E. and W.
65.00	Top of ascent, desc. over rim rock 35 ft. high, bears E. and W.
79.86	The cor. of secs., 3, 4, 9 and 10. Land, rolling and broken. Soil, Sandy loam; 2 nd rate. Timber, scattering scrub cedar. Undergrowth, sagebrush.

June 3, 1912.


U. S. Surveyor.

Subdivision of T.39 S.R.23 E.

chains. June, 7th, 1912, at the corner of secs. 32 and 33 as set by me on resurvey of the S.bdy, at 2 p.m.l.m.t. I set off $37^{\circ}22'30''$ on the lat.arc, and $22^{\circ}48'N.$ on the dec.arc and determine a meridian with the solar.

Thence I run from said sec.cor. as heretofore described N. $0^{\circ}03'W.$ bet. secs. 32 and 33.

Over broken canon wash adobe, and steep sharp spurs.

General drainage to the E. into McCracken Wash.

Ascend 50 ft.

I8.75 Canon wash, 30 lks wide, cse. S.E. Asc. 250 ft.

51.50 Ridge, E & W. Desc. 100 ft.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec.cor. with brass cap marked

$\frac{1}{4}$ S. 32	S 33
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1912

raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

I.00 Gulch, Ese. S.E. Ascend 400 ft.

5.00 Top of spur, projects. S.E. Desc. 125 ft.

5.75 Head of gulch. Cse S.E. Ascend 75 ft..

0.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins in the ground, for corner of secs. 28, 29, 32 and 33 with brass cap marked

T. 39 S	R. 23 E
S 29	S 28
S 32	S 33

1912

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land very broken. Deep adobe washes and sharp ridges of bad lands difficult to survey.

Soil, bad land. washes. 4th, class.

No timber or other vegetation of consequence.

Very little grazing.

June 7th, 1912.

Subdivision of T.39 S.R.23 E.

Chains.	June 8th, 1912 at the corner of secs. 28, 29, 32 and 33 at 9; a.m.l.m.t. I set off $37^{\circ}25'30''$ on the lat.arc, and $22^{\circ}52'30''$ N. on the dec.arc, and determine a meridian with the solar.
40.00	Thence I run, N. $89^{\circ}55'$ E. on random line bet. secs. 28 & 33. Set temp. $\frac{1}{4}$ sec.cor.
80.05	Intersect N. & S. line at the corner of secs. 27, 28, 33 & 3. Thence S. $89^{\circ}55'$ W. on true line bet. secs. 28 & 33, over broken land surface, draining S. Ascend abrupt N.E. slope 250 ft.
20.50	Spur, from bench, S.E. Desc. 150 ft.
30.50	Gulch, cse S; asc. 50 ft.
35.00	Spur, projects S; Desc. 40 ft.
40.02 $\frac{1}{2}$	Set an iron post 3 ft. long, 1 in. dia., 24 ins. in the ground for $\frac{1}{4}$ sec.cor. with brass cap marked
	$\frac{1}{2}\checkmark$ S 28 S 33
	1912
42.00	and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of c. Head of gulch. Cse. S.E. Ascend abrupt N.E. slope 300 ft.
54.00	Top of abrupt asc. NW & SE. Grad. asc.
62.00	Spur, from bench, projects S.E.
75.50	Gulch, cse. S. 35° E. Asc. E slope, 150 ft.
80.05	The corner of secs. 28, 29, 32 and 33. Land open and very broken wash canon sides. Soil rocky and barren. Very little grazing in E. $\frac{1}{2}$ mile. 5th. rate. No timber.
	Thence N. $0.03'$ W. bet. secs. 28 and 29. Ascending over broken surface of small spurs and deep washes, cse. S.E. through scat. scrub cedar.
38.75	Spur from mesa, 250 ft. above sec.cor. projects N.E.
40.00	Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground for $\frac{1}{4}$ sec.cor. with brass cap marked

Subdivision of T. 39 S., R. 23 E.

Chains

$\frac{1}{4}$.S 29	S 28
1912	

and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
This corner is situated on the N slope of spur.

Desc. 175 ft.

June 8: At this corner the sun was obscured by clouds at noon; a lat. observation was impossible.

71.25 Canon wash 30 lks. wide, cse. E. Asc. 50 ft.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 20,21,28 and 29 with brass cap marked

T 39 S	R 23 E
S 20	S 21
S 29	S 28
1912	

and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
A sandstone boulder 25x6x10 ft., marked with a cross at a point N. 34° E., 18 lks. dist and B O marked near the cross for bearing object.

Land broken E. slope of mesa.

Soil, rocky and bare canon wash surface, very little vegetation. An occasional scrub cedar.

4th class land, with very scant grazing.

June 8, 1912.

June 10: At the corner of secs. 20,21,28 and 29 at 10 a.m. I set off $37^{\circ}24'$ on the lat. arc. $23^{\circ}02'N.$ on the dec. and determine ameridian with the solar.

Thence I run N. $89^{\circ}55'E.$ on random line bet. secs. 21 and 28.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.77 Intersect the N. & S. line 10 lks. S. of the cor. secs. 21, 22, 27 and 28.

Thence S. $89^{\circ}51'W.$ on true line bet. secs. 21 and 28.

Over broken, rocky southeasterly slope of mesa, drawing SE. Gradual descent.

13.50 Wash 25 lks. wide, cse. N. $65^{\circ}E.$ Gradual ascent.

39.88² Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for $\frac{1}{4}$ sec. cor. with brass cap marked

$\frac{1}{4}$ S 21
S 28
1912

Subdivision of T. 39 S., R. 23 E.

- Chains raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor.
- 79.77 The corner of secs. 20, 21, 28 and 29.
Land, broken SE. slope of mesa.
Soil, rocky 4th rate. No timber.

June 10, 1912.

June 8: N. $0^{\circ}03'W.$ bet. secs. 20 and 21.

Ascend 125 ft. up steep S. slope of mesa, over huge boulders and bare surface, with an occasional scrub cedar or pinon.

McCracken

8.50 S. edge of Mesa on top of rim rock 40 ft. high. Perpendicular wall, brs. N. $70^{\circ}E$ & S. $70^{\circ}W.$ Grad. desc. through short sage brush and shifting sandy ridges.

. 40.00 Set an iron post, 3 ft. long, 1 in. dia., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor. with brass cap marked

$\frac{1}{4}$	S 20	S 21
---------------	------	------

1912

and dig pits 18x18x12 ins. N. & S. of the post 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of the corner.

All trees within limits were too scrubby to mark.

June 8: At this corner at 3 h p.m. l.m.t., I set off $37^{\circ}24'30''$ on the lat. arc. and $22^{\circ}54'N.$ on the dec. arc. and find the meridian thus secured confirms my course.

June 8, 1912.

June 13: From the $\frac{1}{4}$ cor. bet. secs. 20 and 21, I continue my line N. $0^{\circ}03'W.$

54.00 Descend abruptly from mesa rim bearing NE. and SW. over open broken rocky NW. slope. Leave scat. cedars.

73.00 Huge boulder 15x15x20 ft. on line.

80.00 Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 16, 17, 20 and 21, with a brass cap marked

T 39 S	R 23 E
S 17	S 16
S 20	S 21

1912

and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

Subdivision of T 39 s.r.23 E.

- ains. Land broken and rolling.
Soil, rocky, and sand ridges.
Scattered scrub cedar & pinon, 54.00 chs.
-
- June 13; at the cor. of secs. I6, I7, 20 & 21 at 10, a.m.l.m.t.
I set off $37^{\circ}25'$ on the lat. arc, and $23^{\circ}14'$ N. on the dec.
arc and with the solar determine a meridian.
Thence I run
N. $89^{\circ}51'$ E. on a random line bet. secs. I6 & 21.
Set temp $\frac{1}{4}$ sec. cor.
Intersect the N. & S. line 5 lks. S. of the corner of secs.
I5, I6, 21 & 22.
Thence, S. $89^{\circ}49'$ W. on a true line, bet. secs. I6 & 21.
Over broken mesa, draining S.E. through scat. cedar and
short sagebrush.
Ascend gradually.
Leave cedars, N & S.
Set an iron post 3 ft. long, 1 in. dia., 24 ins. in the ground
for $\frac{1}{4}$ sec. cor. with brass cap marked
- | | |
|------|----|
| S | I6 |
| S | 21 |
| 1912 | |
- dig pits, 18 X 18 X 12 ins. E. & W. of the post, 3 ft. dist.
and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
Enter scrub cedar, N. & SW.
McCracken Edge of mesa, leave cedars, over perpendicular sandstone
ledge 50 ft. brs. N. & SW. descend steep canon breaks, 250 ft.
The corner of secs. I6, I7, 20 & 21.
Land. broken. and rocky.
Soil, 65.00 chs, sandy bench or mesa, 2nd. & 3rd. class.
W. 14.88 chs, canon side, bare wash, & rocky. No vegetation.
Fair grazing on mesa.
Timber, about 35.00 chs, very scat. cedar & pinon.
June 13: Not on line at noon hour; no obs for lat. this
day.

Subdivision of T.39. S.R.23 E.

	Chains.	June 14; at 8 h.a.m.l.m.t. I set off $37^{\circ}25'$ on the lat.arc $23^{\circ}17'$ N.on the dec.arc and determine a meridian with the solar at the corner of secs.I6,I7,20 and 21. Thence I run N. $0^{\circ}03'$ W.betsecs.I6 and I7. Over broken bad lands,draining W.Through scat cedar.
40.00		The point for the $\frac{1}{4}$ sec.corner falling on solid bed rock I mark a cross in sandston face at the point for cor. and set an iron post 3 ft.long, 1 in.in dia.,above the cross, set 24 ins.in mound of stone.for the $\frac{1}{4}$ sec.corner. with brass cap marked. $\frac{1}{4}$ S I7 | S I6 I9I2 and raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of cor. Trees within limits too scrubby for marking.
43.50		Canon wash,30 lks.wide,cse.W.asc.
47.25		Point of spur,proj.W.desc.
48.00		Wash,20 lks.wide,S. 70° W.asc.250 ft.to
65.00		Point of bench,W.Thence along N.W.slope of bench,leave scat.cedar,E.&W.
75.00		Descend abruptly 70 ft.
80.00		Set an iron post 3 ft.long,2 ins.in dia.,24 ins.in the ground for the corner of secs.8,9,I6 and I7,with brass cap marked. T 39 S | R 23 E S 8 | S 9 S I7 | S I6 I9I2 raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of cor. Land broken.Deep washes and barren ridges,draining W. Soil bare and verry thin.mostly bad lands.4th,rate. Scat.gth.of cedar in patches,about 65.00 chs. Scant vegetation,or grazing.
		June 14th, I9I2.
		June 18,;at 2 h.p.m.l.m.t., I set off $37^{\circ}26'$ on the lat.arc, and $23^{\circ}26'$ N.on the dec.arc, and determine a meridian with the solar at the corner of secs.8,9,I6 and I7. Thence N. $89^{\circ}49'$ E.on a random line bet.secs.9 & I6.
40.00		Set temp $\frac{1}{4}$ sec.cor.
79.76		Intersect the N.& S.line,10 lks.S.of the cor.of secs.

Subdivision of T. 39 S., R. 23 E.

Chains	9,10,15 and 16. Thence I run S. $89^{\circ}45'W.$ on true line bet. secs. 9 and 16. Over exceptionally rough, broken bad land surface, draining W. through scrub cedar of scattered growth. Grad. desc. McCracken
9.00	Edge of Mesa at top of ledge 50 ft. high brs. N. & S. Desc. abrupt W. slope over huge sandstone boulders 225 ft. to
16.00	Canon wash, 20 lks. wide, cse. SW. Leave scat. cedars NW. and S. Over hilly bad land surface. Asc. gradually.
39.88	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor. with brass cap marked $\frac{1}{4}$ S 9 S 16 1912
	raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of corner.
58.00	On bench N. & S. enter scat. cedars, thence across bench.
66.00	Descend from bench N. & SW. Leave cedars.
72.76	The corner of secs. 8, 9, 16 and 17. Land, broken and hilly. Soil, poor and stony, 4th class. Timber, scattered cedars in patches, $24\frac{1}{2}$ chs. Very scant grazing.

June 18, 1912.

June 14: I take up my line at the corner of secs. 8, 9, 16

and 17, and run

N. $0^{\circ}03'W.$ bet. secs. 8 and 9, the sun being obscured
by clouds.

Over broken bad lands of rocky washed surface.

21.00 Wash, 25 lks. cse. S. $65^{\circ}W.$ Ascend over bench land.40.00 Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the
ground for $\frac{1}{4}$ sec. corner with brass cap marked $\frac{1}{4}$ S 8 | S 9
1912raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.64.00 Begin gradual ascent over SW. slope of badly broken
sandstone boulders, spurs and deep washes NE. and SW.

Subdivision of T. 39 S., R. 23 E.

Chains	
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for corner of secs. 4,5,8 and 9 with brass cap mkd.
	T 39 S. R 23 E. S 5 | S 4 S 8 | S 9 1912
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of the corner. Land broken and hilly. Soil, thin and barren. Scant vegetation and grazing. No timber.
	June 14: At this corner at apparent noon I set off 23° 17'N. on the dec. arc. and observe the sun on the meridian. The reading of the lat. arc. is 37°27' which is the correct lat.
	June 14, 1912.
	June 18: At the corner of secs. 4,5,8 and 9 at 10h 0m a.m., 1.m.t., I set off 37°27' on the lat. arc. 23°25' on the dec. arc. and with the solar determine a meridian.
	Thence N. 89°45'E. on a random line bet. secs. 4 and 9.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.76	Intersect the N. & S. line, 20 lks. N. of the corner of s. 3,4,9 and 10. Thence I run S. 89°54'W. on true line bet. secs. 4 and 9.
	Over sagebrush mesa, drawing to the NW., thence through scrub cedar.
10.00	Descent bears N. and S.
20.00	Edge of mesa, brs. NE. and SW. Desc. about 150 ft. abrupt NW. slope into canon.
33.50	Canon wash, 25 lks. cse. SW. Leave scrub cedar N & S., thence along base of mesa slope.
39.88	Set an iron post 3 ft. long 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor. with brass cap marked
	$\frac{1}{4}$ S 4 S 9 1912
	raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of corn.
	June 18: At this cor. I set off 23°25'N. on dec. arc. and obs.

Subdivision of T.39 S., R.23 E.

Chains. the sun on the meridian at apparent noon; the reading of the lat.arc is $37^{\circ} 27' 30''$

60.00 Begin abrupt ascent of rocky canon side on SE.slope of mesa ridge, 250 ft. to

74.35 Top of McCracken Mesa, on rim rock, near SE.point, bears NE. and SW.

76.50 W.edge of mesa, bearing NE. and S., over rim rock 40 ft. and steep descent 150 ft.

79.76 The corner of secs.4,5,8, and 9.
Land, broken and rolling.
Soil, poor, bad land and rocky; 4th rate.
Timber, scattered scrub cedar about 33.50 chs.
Scant vegetation. Poor grazing. June 18, 1912.

June 14: At 2h p.m.l.m.t., I set off $37^{\circ} 27'$ on the lat. arc; $23^{\circ} 17' 30''$ N.on the decl.arc; and determine a meridien with the solar at the corner of secs.4,5,8 and 9. Thence

N. $0^{\circ} 03'W.$ on a random line betsecs.4 and 5,

40.00 Set temp. $\frac{1}{4}$ sec.cor.

79.83 Fall 31 lks.W.of the cor.of secs.4,5,32, and 33 on N.bdy. of T.39 S., R.23 E., heretofore described.

Thence I run S. $0^{\circ} 10'W.$ on true line betsecs.4 and 5,
Over rolling open surface.

4.00 Point of McCracken Mesa, bears NE. and SE.;projects W.
Cliff ruins in sandstone walls on line and 2.00 chs.NE.
Steep desc., over broken bed land and rocky surface.

39.83 Set an iron post 3 ft.long, 1 in.in dia., 24 ins.in the ground, for $\frac{1}{4}$ sec.cor., with brass cap marked

$\frac{1}{4}$ S 5 | S 4

1912

raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of cor.

52.00 Wash, 10 lks.wide, 3 ft.deep, course W.

73.50 Foot of canon slope to mesa.

78.25 McCracken Mesa point and spur, NE. and SE.;projects W.
Desc.50 ft.

Subdivision of T.39 S., R.23 E.

Chains.

- 79.83 The cor. of secs. 4, 5, 8, and 9.
 Land, broken and rolling. Soil, rocky and gravelly bad
 lands. Little vegetation. Scant grazing.
 Timber, scattering scrub cedar. June 14, 1912.

June 5: At the cor. of secs. 31 and 32 on S.bdy. of Tp.,
 heretofore described, at 9h a.m.l.m.t., I set off $37^{\circ} 22' 30''$ N. on the lat. arc; and $22^{\circ} 34'$ N. on the decl. arc;
 and determine a meridian with the solar. Thence
 $N.0^{\circ} 03' W.$ bet. secs. 31 and 32,

Over rolling mesa surface, in very scattering cedar and
 pinon and short sagebrush. Gradual ascent.

- 40.00 Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in
 earth and stone mound, on bed rock, for $\frac{1}{4}$ sec.cor.,
 with brass cap mkd.

$\frac{1}{4}$ S 31 | S 32

1912

raise a mound of stone 2 ft. base; $1\frac{1}{2}$ ft. high W. of cor.

- 43.50 Edge of McCracken Mesa, bearing NE. and W. Descend abruptly 500 ft. over N. rim of mesa, on washed bad land canon side.

- 75.75 Canon gulch, brs. NE., dry.

- 80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 29, 30, 31 and 32, with brass cap marked

T 39 S | R 23 E

S 30 | S 29

S 31 | S 32

1912

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W of cor. Land on mesa, rolling 43.50 chs.; balance broken canon soil, sandy and thin on mesa. Fair grazing. In canon soil very poor, 4th rate; little vegetation. Very scattered growth of cedar and pinon pine 80.00 chs

N. $89^{\circ} 52'$ E. on a random line bet. secs. 29 and 32,

- 40.00 Set temp. $\frac{1}{4}$ sec.cor.

- 79.93 Intersect N. and S. line at the cor. of secs. 28, 29, 32, & 33. Thence S. $89^{\circ} 52'$ W. on true line bet. secs. 29 and 32, Over broken land; through scattering cedar and pinon pine Ascending steep SE. slope, 375 ft. over rocky surface to

Note: Feb. 2, 1912, Shell Oil Co. Engrs.
 report finding this monument.
 loose in mound of stones, G.M.T.

Note: Mar. 1, 1912, Shell Oil Co. Engrs.
 report this monument missing,
 although mds. of stone identified
 G.M.T.

Subdivision of T.39 S.R.23 E.

nains.

25.50 Face of perpendicular sandstone ledge, 75 ft. high. brs.

N. & S. 35°W. thence across McCricken Mesa.

39.96 Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in mound of earth and stone, for the $\frac{1}{4}$ sec.cor. with a brass cap marked,
$$\begin{array}{r} \text{S } 29 \\ \hline \text{S } 32 \end{array}$$

1912

raise a mound of stone 2 ft. base, 1 ft. high N. of the cor.

June 5:

At this cor. I set off 22°35'N. on the dec.arc; at 11h.58m.45s.

l.m.t. and observe the sun on the meridian. The reading of the lat.arc is 37°23'30".

The $\frac{1}{4}$ sec.cor is situated on the W.edge of the mesa, from which point is a sharp descent over a ledge 40 ft. high, thence down E side of canon over huge boulders and bare wash surface 450 ft.

75.00
78.25Canon gulch drs. NW.
The corner of secs. 29, 30, 31 and 32.

Land, N.E. rolling mes., sagebrush & fair grazing. W.E. is barren wash canon surface. Little vegetation.

No timber.

June 5, 1912.

June 11: at 9 h.a.m.l.m.t. I set off 37°24' on the lat. arc; 23°07'30" N. on the dec.arc and determine a meridian with the solar, at the last described corner.

Thence I run

N. 39°51'W. on a random line, bet. secs. 30 and 31.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

79.23 Intersect the Colorado Guide Meridian 12 lks. N. of the corner of secs. 25, 30, 31 and 36, heretofore described.

Thence, S. 39°56'E.

On a true line bet. secs. 30 and 31.

Over broken and rolling surface. draining S.W. grad. asc.

3.00 Gulch, N.W. a small alkali spring about one chain S. in gulch. Drains N.W. Ascend.

Note: May 1, 1935, Shell Oil Co. engr.
report this monument missing
although md.of stone identified
G.W.J.

Subdivision of T.39 S.R.23 E.

Chains.

- 7.50 Point of spur, projects N. Descend steep E.side.
- 9.50 Junction of two washes, from SW & SE, Course of main wash, N. ascend.
- 30.00 Low ridge, brs. N.W. & S...
- 39.23 Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the ground, for $\frac{1}{4}$ sec.cor. with a brass cap marked

$$\begin{array}{c} \frac{1}{4} \\ \text{S } 30 \\ \hline \text{S } 31 \\ \text{I9I2} \end{array}$$

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of corner.
- 79.23 The corner of secs. 29, 30, 31 and 32.
Land badly broken canon valley washes,
Soil, rocky and washed sand deposits. 4th. rate.
No timber, little vegetation, scant grazing.
-
- N. 0°03' W. bet. secs. 29 and 30.
Over broken bad lands, draining W. Desc. abruptly 75 ft.
- 2.50 Gulch, cse. N.W. asc. 75 ft.
- 14.00 Ridge, brs, N.W & S.E. Desc.
- 35.25 Canon wash, 30 lks, wide, cse. N.W. Asc.
- 38.75 Spur point, projects W. desc.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in tie ground for $\frac{1}{4}$ sec.cor. with a brass cap marked

$$\begin{array}{c} \frac{1}{4} \text{ S } 30 \quad | \quad \text{S } 29 \\ \hline \text{I9I2} \end{array}$$

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- 43.00 Canon wash, 30 lks. wide, cse. S.W. 5.00 chs. thence N.W. gradual ascent.
- 50.00 Set an iron post 3 ft. long, 2 ins., in dia., 24 ins. in the ground, for the corner of secs, I9, 20, 29 and 30. with a brass capmarked

$$\begin{array}{c} \text{T } 39 \text{ S } | \text{ R } 23 \text{ E } \\ \text{S } 19 \quad | \quad \text{S } 20 \\ \hline \text{S } 30 \quad | \quad \text{S } 29 \\ \text{I9I2} \end{array}$$

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of corner.
- Land, broken canon valley, washed surface.
Soil, rocky & sand washes, 4th. rate. Scant grazing.
No timber.

June II, 1912.

(37)

Subdivision of T.39 S?R.23 E.

Chains.

June 10; at 3 h.p.m.l.m.t. I set off $37^{\circ}24'$ On the lat.

arc; $23^{\circ}03'30''$ N.on the dec.arc and determine a meridian with the solar at the corner of secs. I9,20,29 and 30.

Thence I run

N. $89^{\circ}52'$ E.on a random line bet.secs.20 and 29.

40.00 Set temp $\frac{1}{4}$ sec.cor.

80.19 Intersect the N.& S.line, 9 lks.N of the corner of secs. 20,21,28 and 29.

Thence, S. $89^{\circ}56'$ W.on a true line,bet.secs.20 and 29.

Ascend steep N.W.slope of canon,washed side.Over steep slope and huge sandstone boulders.An occasional scrub cedar.

I2.75 East edge of mesa,at top of ledge 50 ft.high.150 ft.above the sec.cor.Rim rock brs.N.& S.W.Thence across slightly rolling mesa,of drift sand surface, and partly exposed bed rock. This is McCracken Mesa.

35.50 W.edge of mesa,brs.N.E & S.W.Desc.perpendicular sandstone wall 100 ft.thence on abrupt slope.over huge bldrs.

40.09 Set an iron post 3 ft.long, 1 in.in dia., $\frac{1}{4}$ ins.in the ground for the $\frac{1}{4}$ sec.cor.with brass cap marked

S 20
S 29
I912

raise a mound of stone 2 ft.basc, $1\frac{1}{2}$ ft.high N.of the cor.

Continue desc.more gradual.

75.00 Desc.becomes steep.160 ft.

80.19 The corner of secs.I9,20,29 and 30.

Land broken.

Soil,stony openwashed surface, and drift sand.4th.rate. An occasional scrub cedar or pinon.Little vegetation, except on mesa,where the grazing is fair.

June 10th, 1912.

Subdivision of T.39 S.R.23 E.

Chains.	June 11th, from the corner of secs. I9, 20, 29 and 30 # run N. 98° 56' W. on a random line bet. secs. I9 & 30.
40.00	Set temp $\frac{1}{4}$ sec.cor.
79.07	Intersect the Colorado Guide Meridian, 12 lks.S. of the corner of secs. I9, 24, 25 and 30, heretofore described. Thence, S. 89° 51' E. On true line bet. secs. I9 and 30. Over open brokenbad lands draining N.W. into Recapture Creek.Grad.asc.
39.07	Low ridge N. & S. Set an iron post 3 ft.long 1 in.in dia., 24 ins.in mound of earth & stone,with a brass cap mkd.
	$\frac{1}{4}$ ✓ <u>S 19</u> <u>S 30</u> I912
	and raise a mound of stone 2 ft.base; $1\frac{1}{2}$ ft.high N.of cor The bed rock was too close to the surface to set the corner post deeper in the earth.
43.50	Canon wash, 30 lks.widemcse.N.W.Grad.asc.
79.07	The corner of secs. I9, 20, 29 and 30. Land broken canon valley,bad land & stony surface. Soil,rocky & barren wash surface.Scant grazing.4th,rate. June 11: No timber. The sun was obscured by clouds at noon.Impossible to observe for lat.
I8.00	N. 0° 03' W.bet.secs.I9 and 20. Over broken bad lands draining W.Desc.abruptly.100 ft.t Wash, 25 lks.wide,cse.W.Asc.100 ft.over steep S.slope..
24.00	Top of 40 ft.ledge,brs.E.& S.W.Grad.asc.through scat. cedar & pinon,over drift sand ridges.and exposed bed rock surface. June 11: At this point,at 2 h.p.m.l.m.t.I set off 37° 24' 30" on the lat.arc and 23° 07' 30" N.on the dec.arc, and determine a meridian with the solar.
40.00	Set an iron post 3 ft.long 1 in.in dia., 24 ins.in the ground for the $\frac{1}{4}$ sec.cor.with brass cap marked,

$\frac{1}{4}$ S 19 | S20
I912

Subdivision of T. 39 S., R. 23 E.

Chains	raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor. Continue ascent 60 ft. to
45.50	Spur, projects E. Desc. 75 ft.
50.00	Dry gulch, cse. W. Asc.
56.00	Short ridge, brs. N.E. & S.W. Desc. abrupt N. slope 175 ft. over a series of ledges.
61.00	Base of abrupt descent, brs. E & W.
80.00	Set an iron post 3 ft. long 2 ins. in dia., 24 ins. in mound of earth and stone for the cor. of secs. 17, 18, 19 and 20, with brass cap marked
	T 39 S. R 23 E S 18 | S 17 S 19 | S 20 1912
	raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor. The soil was too thin to set the corner post the required length, on account of underlying stone.
	No trees for marking within limits.
	Land broken and very rough.
	Soil, thin and barren, and drifted sand 4th rate.
	Little vegetation. Scant grazing.
	An occasional scrub cedar or pinon.
	June 11, 1912.
40.00	June 14: The sun being obscured by clouds, I turn off from my N. & S. line bet. secs. 17 and 20, a course N. $89^{\circ}56' E.$ and run on a random line bet. secs. 17 and 20.
79.92	Set temp. $\frac{1}{4}$ sec. cor.
	Intersect the N. & S. line 26 lks. S. of the cor. of secs. 16, 17, 20 and 21.
	Thence S. $89^{\circ}45' W.$ on true line bet. secs. 17 and 20.
	Over broken land draining N. & NW. A few scat. cedar & pinon.
8.40	Wash 10 lks. wide, cse. N. Asc.
20.00	Short ridge bre. N. & S. Desc. gradually over open rolling bench land.
39.96	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor. with brass cap marked

Subdivision of T. 30 S. R. 23 E.

S 17

S 20

1913

A scrub cedar, 8 ins. in dia.,

E. 74° E., 117 lbs. dist. marked $\frac{1}{4}$ S 17 E.T.

A scrub cedar, 14 ins. dia.,

S. 45° W., 120 lbs. dist. marked $\frac{1}{4}$ S 20 E.T.

41.00 Descend abruptly SW. slope 100 ft.

55.00 Base of descent, trs. N. 70° W. and SE. Thence over sandy
gravelly surface, along foot of mesa.

74.00 Wash, 40 lbs. wide, cse. NW.

78.92 The corner of secs. 17, 18, 19 and 20.

Land, broken and rolling.

Soil, rocky and wash sand and gravel, 4th rate.

An occasional scrub cedar and pinon. Scant grazing.

June 14, 1913.

June 15: At the corner of secs. 17, 18, 19 and 20 at 10h
a.m.t., I set off $37^{\circ}25'$ on the lat. arc. $33^{\circ}30'$
on the dec. arc. and determine a meridian. Thence I ran
N. $89^{\circ}51'W.$ on random line bet. secs. 18 and 19.

40.00 Set temp. $\frac{1}{4}$ sec. corner.78.92 Intersect the Colorado Guide Meridian 2 lbs. S. of cor.
secs. 19, 24, 25 and 30, heretofore described.Thence S. $89^{\circ}50'E.$ on true line bet. secs. 18 and 19.

Over open broken surface. Desc. 50 ft.

7.75 Right bank of Recapture Creek, bank 15 ft. high, cse. SE.

10.25 Creek, 40 lbs. wide, clear water 4 ins. deep, cse. SE.

10.75 Left bank of creek N. & S. Asc. gradually.

19.00 Base of spur, N. & S. Asc. 75 ft.

24.00 Flat spur, proj. S. Desc. 100 ft. on abrupt E. slope.

30.00 Desc. becomes gradual.

35.25 Wash, 15 lbs. wide, 3 ft. deep, cse. S.

38.92 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in
a mound of earth and stone for the $\frac{1}{4}$ sec. cor. with
tree cap marked

Subdivision of T.39 S.R.25 E.

Chains.

1 S 18

S 19

I9I2

raise a mound of stone 2 ft.base; $\frac{1}{2}$ ft.high N.of cor.

The corner post could not be set full depth in ground
on account of stone near surface.

42.75 Canon wash, 21 lks.wide.cse.SE.

44.85 Left bank of wash.Grad.asc.

66.25 Spur, proj.N.Desc.grad.

78.92 The corner of secs.I7,I8,I9, and 20.

Land broken.canon washes, and drift sand.

Soil, rocky & sandy.Very poor, 4th, class & barren.

Little vegetation.Poor grazing.

The sun obscured by clouds at noon, therefore no lat.
observation practical.

Thence N.0°03'W.bet secs.I7 and I8.

Over broken bad lands,draining S.W.

6.50 Wash 30 lks.wide,cse.NW.asc.

12.00 Point of spur from benchW.desc.

16.00 Canon wash, 100 lks.wide,75 ft deep,drains W.Asc:gradually.

29.00 Ascent becomes steep 150 ft.

34.00 Point of bench,brs.SW.across bench.

40.00 Set an iron post 3 ft.long, 1 in.in dia.,24 ins.in a mound
of earth & stone, on bed rock, for the sec.cor.with brass
cap marked 1 S 18 | S 17^V
 I9I2

raise a mound of stone 2 ft.base, $\frac{1}{2}$ ft.high W.of corner.

corner set on solid bed rock.

descend into canon on NW slope of mesa.

52.00 Bottom of canon at bend from NW to SW.ascend steep N.side.
150 ft.to

62.75 Point of bench,projects W.Desc.150 ft.

70.50 Head of gulch,csc.W.asc.125 ft.

78.50 Top of ascent.E.& W.Thence along W.slope of canon.

80.00 Set an iron post 3 ft.long, 2 ins.in dia.,24 ins.in
a mound of earth & stone for cor.of secs.7,8,17 and 18
with a brass cap marked,

Subdivision of T.39 S.R.23 E.

Chains

T 39 S	R 23 E
S 7	S 8
S 18	S 17
1912	

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.
Subsurface stone rendered it impossible to set corner
post full length in the ground.

Land badly broken canon side, 74.00 chs. Thin soil on mesa
6.00 chs.

Soil, very poor. 4th rate.

No timber. Scant grazing.

At this corner at 4:p.m.l.m.t. I set off $37^{\circ}26'$ on the lat.
arc; $23^{\circ}20'$ N. on the dec.arc and determine a meridian,
which coincides with the line just run.

June 15th, 1912.

June 20; at 10, a.m.l.m.t., \pm set off $37^{\circ}26'$ on the lat.
arc; $23^{\circ}27'30''$ N. on the dec.arc and determine a meridian
with the solar, at the corner of secs. 7, 8, 17 & 18.

Thence I run N. $89^{\circ}45'$ E. on a random line bet. secs. 8 & 17.

40.00 Set temp $\frac{1}{4}$ sec.cor.

80.00 Intersect N. & S. line, 3 lks. N. of the corner of secs. 8,
9, 16 and 17.

Thence S. $89^{\circ}46'$ W. on a true line bet. secs. 8 & 17.

Over broken rocky land, draining SW. Desc. 75 ft.

13.00 Base of descent. over ridge, brs. N & S. Thence over rolling
bench surface, gradual descent.

38.30 E side of canon, from N. 60° E to S.

40.00 Point for corner falls in wash 30 lks wide. cse. S. Cor. not

43.30 W. side of canon on bench. Canon brs. N. 60° E & S.

Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in md. of
earth and stone for witness corner to the $\frac{1}{4}$ sec.cor. with
brass cap marked $\frac{1}{4}$ S 8 W C

S 17
1912

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N of cor.

Underlying stone too near surface to set post in the
ground full length.

Subdivision of T 39 S.R.23 E.

Chains.

70.00 Gradual descent.

80.00 The corner of secs. 7, 8, I7 and I8.

Land broken and rolling.

Soil poor thin and stony.

Scant grazing, No timber.

June 20: Enroute between transit stations at noon.

N. $89^{\circ}50'$ W.on a random line betsecs.7 & I8.

40.00 Set temp $\frac{1}{4}$ sec.cor.

78.80 Intersect the Colorado Guide Meridian, 13 lks.S.of the corner of secs. 7, I2, I3 and I8, heretofore described.

Thence I run,

S. $89^{\circ}45'$ E.on true line betsecs.7 and I8.

Over open broken surface, ascend abruptly 100 ft.

8.80 Top of ascent, N.& S.grad.desc.

36.80 Set an iron post, 3 ft.long 1 in.in dia., 24 ins.in the ground for $\frac{1}{4}$ sec.cor.with brass cap marked

$\frac{1}{4}$
S 7
—
S I8
I9I2

raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high N.of corner.

Continue grad.desc.along N side of gulch,draining E.

65.30 Descend abrupt W.side of canon, 150 ft.

69.80 Bottom of canon. I ch.wide dry.cse.S.Thence across canon bottom land.

74.50 Ascend abruptly, 125 ft.

78.80 The corner of secs. 7, 8, I7 and I8.

Land broken..

Soil thin and rocky.Poor, 4th, class.

No timber. June 20th, I9I2.

June I7, I9I2, starting at the corner of secs. 7, 8, I7 and I8 too late to test my instrument for lat.and too early in p.m.to secure a satisfactory solar meridian,I continue my line from the south from the corner, and run,

N. $0^{\circ}03'$ W.betsecs.7 and 8.

Over broken W.slope of canon.

Subdivision of T.39 S.R.23 E.

Chains.

- 21.00 Base of descent, 100 ft. below sec.cor. Thence across canon bottom.
- 30.00 Canon wash, dry, 40 lks. wide. cse. S. $20^{\circ}W$. asc. steep rocky N.W. slope from canon 150 ft.
- 33.50 Top of ascent, brs. NE & SW. Thence over rolling bench surface
- 40.00 Set an iron post 3 ft. long 1 in in dia., 24 ins. in the ground, for $\frac{1}{4}$ sec.cor. with a brass cap marked

$$\begin{array}{c|c} \frac{1}{2} & S 7 \\ \hline S 6 & S 5 \\ \hline S 7 & S 8 \end{array}$$

I912
- raise a mound of stone, 2 ft. base $1\frac{1}{2}$ ft. high W. of corner.
- 60.00 Wash 10 lks. wide, cse. E.
- 60.00 Set an iron post, 3 ft. long 2 ins. in dia., 24 ins. in a mound of earth & stone, (bed rock too near surface to set full depth) for cor. of secs. 5, 6, 7 and 8. with a brass cap marked
- | | | | |
|------|---|------|---|
| T 39 | S | R 23 | E |
| S 6 | | S 5 | |
| S 7 | | S 8 | |
- I912
- raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of corner.
- Land open broken & rolling.
- Soil, thin and stony. 4th, class.
- Very scant vegetation. clumps of salt sage. poor grazing.
- No timber.

June 17; at 2:p.m.l.m.t. I set off $37^{\circ}27'$ on the lat.arc; $23^{\circ}24'30''$ N. on the dec.arc and determine a meridian with the solar at the corner of secs. 5, 6, 7 and 8.

Thence N. $89^{\circ}46'E$.

On a random line bet. secs. 5 and 8.

40.00 Set temp $\frac{1}{4}$ sec.corner.

79.88 Intersect the N. & S. line, 9 lks. N. of the corner of secs. 4, 5, 8 and 9.

Thence S. $89^{\circ}50'W$.

On true line bet. secs. 5 and 8.

Descending SW slope from mesa.

5.00 Foot of descent. base N & S.

Thence over broken ridges and washes, draining SW.

Subdivision of T.39 S.R.23 E.

Chains.

- 39.94 Set an iron post 3 ft.long 1 in.in dia.,24 ins.in a Md. of earth & stone,(stone strata too near surface to set post in ground firmly)for $\frac{1}{4}$ sec.cor.with brass cap mkd.

$$\begin{array}{c} \frac{1}{2} \\ \text{S } 5 \\ \hline \text{S } 8 \\ \text{1912} \end{array}$$

- raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high N.of corner.
- 54.25 Wash,20 lks.wide,cse S.
- 66.00 Canon wash 50 lks.wide,cse.S.E.
- 79.88 The corner of secs.5,6,7 and 8.
Land openbroken & ridges,with intervening washes.draining south.
Soil stony and thin wash surface.Very poor.Scant grazing.
No timber.

Thence I run

N. $89^{\circ}45'$ W.on a random line betsecs.6 and 7.

- 40.00 Set temp. $\frac{1}{4}$ sec.cor.
- 78.86 Intersect the Colorado Guide Meridian 42 lks.N.of the corner of secs.1,6,7 and 12, heretofore described.Thence N. $89^{\circ}57'$ E.on true line,betsecs.6 and 7.
Over rolling land draining W.Grad.desc.
- 8.70 Wash,30 lks.wide.cse NW.
- 26.25 Wagon road between Bluff Utah and Cortez and Dolores Col.
Bears,NW & S. 60° E.
- 38.86 Set an iron post 3 ft.long 1 in.in dia.,24 ins.in a mound of earth & stone(rock strata too near surface to set post solid)for $\frac{1}{4}$ sec.cor.with brass cap marked

$$\begin{array}{c} \frac{1}{4} \\ \text{S } 6 \\ \hline \text{S } 7 \\ \text{1912} \end{array}$$

- raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high N.of corner.
- 41.15 Wagon road bet.Bluff and Cortez.Cse.N. 60° E.& S. 60° W.
- 74.70 N.slope of knoll.
- 78.86 The corner of secs.5,6,7 and 8.
Land rolling and broken.
Soil,poor and thin.Grazing scant.No timber.

Subdivision of T.39 S.R.23 E.

Chains.

- Thence I run
 $80^{\circ}03'W$.on a random line bet.secs.5 and 6.
- 40.00 Set temp $\frac{1}{4}$ sec.cor.
- 79.82 Intersect the N.bdy of T.39 S.R.23 E. 25 lks.W. of the cor. of secs.5,6,31 and 32, heretofore described. Thence I run $80^{\circ}07'W$.on true line bet.secs.5 and 6.
 Descend abrupt SE slope of mesa side, over huge sandstone boulders, and washed ridges & deep draws.
- 10.00 Foot of slope, base brs.NE & SW. 125 ft. below cor. Over rolling open bench.
- 39.82 Set an iron post 3 ft. long 1 in. in dia., 24 ins. in a mound of earth & stone, (rock strata too near surface to admit of setting post in earth full depth) for the $\frac{1}{4}$ sec.cor. with a brass cap marked
- | | | |
|---------------|-----|------|
| $\frac{1}{4}$ | S 6 | S 5 |
| | | 1912 |
- raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.
- 54.00 Wash 10 lks.wide, 3 ft. deep cse.E.
- 66.80 Wagon road bet.Bluff and Dolores. N. $70^{\circ}E$ & S. $70^{\circ}W$.
- 79.82 The corner of secs.5,6,7 and 8.
 Land open rolling & broken.
 Soil, poor thin washed surface, stony. 4th, class.
 Scant grazing. Little vegetation.
 No timber.
- June 17th, 1912.

June 19: At 9h.a.m.l.m.t. I set off $37^{\circ}29'$ On the lat.arc; $23^{\circ}26'30''N$. on the dec.arc at my Polaris meridian at my camp, near the center of sec.28 T.38 S.R.23 E. and find the meridian thus secured with the solar, falls on the Polaris meridian established May 24th, and 25th.
 Hourly tests taken on the same point during the day verifies the complete adjustment of the solar apparatus.
 For oaths of the U.S. Surveyors, and certificates of assistants, see book V. of this Group.

Daniel B. Miller

U.S. Surveyor.

GENERAL DESCRIPTION.

This township is about one half gently rolling mesa, covered with medium growth sage brush, and a few scrub cedars and pinon scattered in portions of the township. This is known as McCracken Mesa.

The soil of the mesa land is of light sandy texture, and if irrigated would be very productive.

There is a very good growth of bunch grass on the mesa portion, furnishing good winter grazing,

Recapture Creek, which is in the summer and fall nearly or quite dry, usually, but in the spring and early summer having a stream from 10 to 25 ft. wide, and one to three feet deep and greater, in flood time, enters the township on the W. bdy, and is the only living stream in the Tp.

That portion of the township not on the mesa, is from 100 ft. to 300 ft. below the mesa,

There is usually a drop from the mesas of from 10ft. to 40 ft., and sometimes more, over perpendicular sandstone face, at the foot of which the surface slopes in steep broken descent over adobe washes and bad land ridges and big sand stone boulders, the slope of which is into Recapture Creek in the western part, and into McCrackin Wash in the S. Central part.

There is some drift sand surface near the creek and McCracken Wash, but the soil is thin and there is not much vegetation, or grazing except on the mesa land.

Several small springs are noted, but they do not furnish water enough for much stock, except in early spring. The water is generally alkaliied, more or less.

The cedar and pinon timber is fit only for fuel.

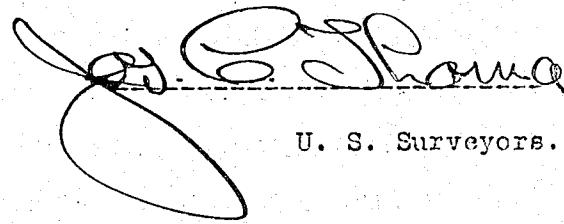
No mineral or coal indications were noticed in this township.

The mesa ruins referred to in the field notes are the remains of stone dwellings or other buildings of a prehistoric race.

The buildings were usually built on high locations, and in groups, the rooms of which were 8 to 12 ft. in width or length, the walls of sandstone with squares corners showing one or two layers above the surface now, but excavation shows that the rooms are at this time drifted full of earth; there are no signs of habitation.

There are no settlers within the bounds of this township.

Daniel B. Miller


O. S. Shourds

U. S. Surveyors.

BOOK A-412

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability,
....., U. S. Surveyor, during the periods and in the capacities
stated opposite our several signatures, in surveying all those parts or portions of

For certificate of assistants see book "V" T.39 p. 26 E.

of the Meridian, in the State of which are represented in the foregoing field notes as having been executed by him, and under his direction; and that said survey has been, in all respects, to the best of our knowledge and belief, well and faithfully executed.

Subscribed and certified to before me on the dates of the final service as shown above.

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191_____, I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oath of U.S. Surveyor see book "V" T. 39 S., R. 26 E.

of the _____ Meridian, in the State of _____, which are represented by the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191 }



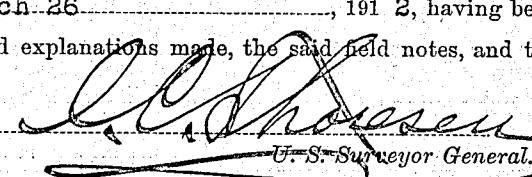
APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, February 7, 1916

The foregoing field notes of the survey of the Subdivisional lines of Township No. 39 South, Range No. 23 East of the Salt Lake Base and Meridian, Utah,

executed by Daniel R. Miller and Joseph C. Thomas
under his special instructions dated March 26, 1912, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.


U. S. Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

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4-679

E.B.

BOOK A-412

Filed Jul 1 1913

E.R.

FIELD NOTES

OF THE SURVEY OF THE

NORTH AND EAST BOUNDARIES

O F

T. 38 S., R. 23 E.

Of the Salt Lake Base and Meridian,

in the State of UTAH.

EXECUTED BY

Jos. C. Thoma

in the capacity of U.S. Surveyor, under instructions dated March 26th, 1912,
issued by the United States Surveyor General to govern surveys included in
group No. 16, which were approved by the Commissioner of the General Land
Office, April 2, 1912.

Survey commenced June 6th, 1912.

Survey completed June 11th, 1912.

BOOK A-412

INDEX DIAGRAM.

Township Range

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
10	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

East Boundary of T. 38 S., R. 23 E.

Chains.

Survey commenced June 6, 1912, and executed with a Young & Sons Light mountain transit No. 8146 the description of which is more fully set forth in Book "A" of the field notes of the survey of this Group.

To test the solar apparatus by comparing its indications resulting from solar observations made during a. m. and p. m. hours, with a meridian determined by observations on Polaris, I proceed as follows:

At my camp near the centre of Sec. 34, T. 38 S., R. 23 E., on the meridian as established on May 24, 1912 (see page 8, Book of N. and E. bdys. of T. 39 S., R. 23 E.), I proceed as follows:

June 6: At 7h 56m, a. m., l. m. t., I set off $37^{\circ} 29'$ N. on the lat. arc, $22^{\circ} 40' 30''$ N. on the decl. arc, and determine with the solar a meridian, the line of which falls $\frac{1}{4}$ inch to the W. of the stake set 10 chs. N. of my station, on the meridian as obtained by obsn. on Polaris.

June 6: At 4h 28m, p. m., l. m. t., I set off $37^{\circ} 29'$ N. on the lat. arc and $22^{\circ} 43'$ N. on the decl. arc, and determine with the solar a meridian, which hits the stake set 10 chs. N. of my station. I therefore conclude my instrument is in adjustment.

June 6: At 9h 28m, a. m., l. m. t., I set off $37^{\circ} 28'$ N. on the lat. rac, $22^{\circ} 41'$ N. on the decl. arc, and at the cor. of Tps. 38 and 39 S., Rgs. 23 and 24 E., determine a meridian with the solar.

Thence I run, from said Tp.cor., as heretofore described, North, bet. secs. 31 and 36.

Over rolling open mesa, covered with sage brush and buck-thorn undergrowth.

40.00 Set an iron post, 3 ft. long, .1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap md.

S 36	S 31
------	------

1912

Dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

East Boundary of T. 38 S., R. 23 E.

Chains:

- 55.00 Shallow dry draw, 16 lks. wide, drains SE.
 80.00 Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 25, 30, 31 and 36, with brass cap mkd.

T 38 S	
R 23 E	R 24 E
S 25	S 30
S 36 S 31	
1912	

- Dig pits, 18x18x12 ins., in each sec. $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
 Land, gently rolling mesa.
 Soil, sandy loam; 1st rate.
 No timber, sage brush and buck-thorn undergrowth.

Thence I run

North, bet. secs. 25 and 30.

Over rolling mesa land, covered with sage brush and buck-thorn undergrowth.

- 16.00 Enter scattering scrub cedar, bears NW. and SE.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	
S 25	S 30
1912	

From which

A cedar, 12 ins. in diam., bears N. $57^{\circ} 45'$ E.,
 38 lks. dist., mkd. $\frac{1}{4}$ S 30 BT.

A cedar, 10 ins. in diam., bears S. $32^{\circ} 30'$ W.,
 71 lks. dist., mkd. $\frac{1}{4}$ S 25 BT.

- 66.00 Start desc. over N. slope of mesa, bears NW. and SE.
 68.00 Dry draw, 15 lks. wide, drains SE.
 73.00 Dry draw, drains SE.; asc. abruptly.
 75.00 Rim rock 20 ft. high, bears NW and SE.; continue over spur of mesa, projecting E.
 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 19, 24, 25 and 30, with brass cap mkd.

East Boundary of T. 38 S., R. 23 E.

Chains	T 38 S R 23 E | R 24 E S24 | S19 S25 | S30 1912
	Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Land, rolling. Soil, sandy loam on mesa, stony and clay on slopes; 1st and 4th rate.

June 6: At 11h 58m a.m., l.m.t., I set off $22^{\circ}41'N.$ on
the decl. arc. and at the cor. of secs. 19, 24, 25
and 30, observe the sun on the meridian, the resulting
lat. is $37^{\circ}28'N.$

Thence I run

North bet. secs. 19 and 24.

Desc. over SW. slope of Alkali Canon, over a series of
ridges and ravines, through scattering scrub cedar
timber.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor. with brass cap mkd.

$\frac{1}{4}$
S24 | S19
1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

58.00 Leave scattering scrub cedar timber, bears NW. and SE.

60.00 Foot of slope of Alkali Canon, bears NW. and SE.

Desc. gradually over dense sage brush undergrowth.

67.00 Alkali Wash, (dry) 1 ch. wide, 30 ft. deep, drains SE.

Ascend.

69.00 Start abrupt asc. over NE. slope of canon.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in
the ground for the cor. of secs. 13, 18, 19 and 24,
with brass cap marked.

T 38 S
R23 E | R24 E
S13 | S18
S24 | S19
1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

East Boundary of T. 38 S., R. 23 E.

Chains

Land, broken.

Soil, sandy in bottom of Alkali Canon; adobe and clay on slopes, 4th rate.

Scattering scrub cedar timber, partly dead.

Thence I run

North bet. secs. 13 and 18.

Asc. over NE. slope of canon, over series of ridges and ravines.

20.00 Enter scattering scrub cedar and pinon timber, bears NW. and SE.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor. with brass cap mkd.

$\frac{1}{4}$	
S13	S18
1912	

From which

A cross on a large malapai boulder bears N. $34^{\circ}45' E.$, 19 lks. dist. boulder mkd. with a cross BO $\frac{1}{4}$ S 18.

A cross on a large malapai boulder bears S $56^{\circ}45' W.$, 29 lks. dist., boulder mkd. with cross BO $\frac{1}{4}$ S 13.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for the cor. of secs. 7, 12, 13 and 18, with brass cap marked

T 38 S	
R23 E | R24 E	
S12 | S7	
S13 | S18	
1912	

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Land, broken.

Soil, adobe and clay; 4th rate.

Timber, scattering scrub cedar and pinon.

June 6, 1912.

East Boundary of T. 38 S., R. 23 E.

Chains. June 7: At 11h 59m, a. m., l. m. t., I set off $23^{\circ} 47'$ N. on the decl. arc, and at the cor. of secs. 7, 12, 13 and 18, observe the sun on the meridian, the resulting lat. is $37^{\circ} 31'$ N.

I project my line of the day previous

North, bet. secs. 7 and 12.

Over rocky NE. slope of canon, over a series of ridges and ravines, through scattering scrub cedar and pinion timber.

32.00 Top of ridge, bears NW. and SE.; continue over nearly level land covered with dense pinion and cedar timber.

39.00 Start abrupt desc., over rocky N. slope of ridge.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	S 12	S 7
	1912	

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

44.50 Start abrupt desc. over rimrock, 50 ft. high, bears NW. and SE.

63.00 Bottom of canon, 200 ft. deep, drains SW.; asc. over rocky SW. slope of ridge.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 1, 6, 7 and 12, with brass cap mkd.

T 38 S		
R 23 $\frac{3}{4}$ E	R 24 E	
S 1	S 6	
S 12	S 7	

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land mountainous and covered with pine and scrub cedar timber

Soil, clay and adobe; 4th rate.

June 7: At 2h 29m, p. m., l. m. t., I set off $37^{\circ} 31'$ N., on the lat. arc, $23^{\circ} 48'$ N. on the decl. arc, and at the cor. of secs. 1, 6, 7 and 12, determine the meridian with the solar.

East Boundary of T. 38 S., R. 23 E.

Chains Thence I run

North, bet. secs. 1 and 6.

Asc. over rocky broken SW. slope of mesa, over a series of ridges and ravines, covered with dense pinion and scrub cedar timber and jack pine undergrowth.

17.00 Alkali spring on line.

24.00 Rim rock 50 ft. high, bears NW. and SE.; continue abrupt asc.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	
S 1	S 6
1912	

Raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

41.00 Top of mesa, bears NW. and SE.; continue over nearly level land, covered with dense pinion and cedar timber, and dense jack pine undergrowth.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of Tps. 37 and 38 S., Rgs. 23. and 24 E., with brass cap mkd.

T 37 S	
R 23 E	R 24 E
S 36	S 31
S 1 S 6	
T 38 S	

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor.

Land broken and level.

Soil, adobe and clay on the slope and sandy loam on mesa; 1st and 4th rates.

Timber, cedar and pinion.

June 7, 1912.

June 8: At 8h 29m, a. m., 1. m. t., I set off $37^{\circ} 33'$ N. on h the lat. arc, $22^{\circ} 52' 30''$ N. on the decl. arc, and at the cor. of Tps. 37 and 38 S., Rgs. 23 and 23 E., determine the meridian with the solar.

Thence I run, from said Tp.cor., as heretofore described,

North Boundary of T. 38 S., R. 23 E.

Chains.

East on a random line, along the N. bdy. of T. 38 S., R. 23 E., setting temp. $\frac{1}{4}$ sec. and sec. cors. at intervals of 40.00 chs.; and, at 477.46 chs., intersect the east boundary of the twp., 165 lks. S. of the cor. of Tps. 37 and 38 S., Rgs. 23 and 24 E., previously described. The falling answers to a correction of $0^\circ 12'$, or 27.5 lks. per mile; therefore the bearing of the true line is S. $89^\circ 48'$ W.

June 8, 1912.

Thence L run

S. $89^\circ 48'$ W., bet. secs. 1 and 36, marking and blazing true line.

Desc. over W. slope of mesa, covered with scattering scrub cedar and pinion timber.

- 7.00 Desc. abruptly over rim rock 60 ft high, bears NE. and SW.
 24.00 Foot of slope, bears NE. and SW.; leave cedar and pinion timber, enter open park.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

1
4
S 36

S 1

.1912

- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
 53.00 Alkali Wash 1 ch. wide, 20 ft. deep, (dry) drains SE.; asc. over a series of ridges and ravines.
 71.00 Enter scattering scrub cedar timber, bears NW. and SE.
 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 1, 2, 35 and 36, with brass cap mkd.

T 37 S R 23 E

S 35 | S 36

— | —
S 2 | S 1

T 38 S

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Land broken.

North Boundary of T. 38 S., R. 23 E.

Chains. Soil, clay and adobe on the slopes; gravel in the open park; 3rd and 4th rates.

Timber, scrub cedar and pinion.

Thence I run

S. $89^{\circ} 48'$ W., bet. secs. 2 and 35.

Asc. over broken S. and E. slopes of mesa, covered with large boulders and scrub cedar timber.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 35

S 2

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

42.00 Top of mesa bears N. and S. ins. SE.

62.00 Dry draw, 30 lks. wide, drains SW.

64.00 Dry draw, 40 lks. wide, drains SE.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 2, 3, 34 and 35, with brass cap mkd.

T 37 S R 23 E
S 34 | S 35

S 3 | S 3
T 38 S
1912

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land broken on the slopes and rolling on mesa.

soil, gravel in the E. $\frac{1}{2}$; sandy loam on mesa; 1st and 3rd rates. Timber, scrub cedar.

June 10: At 2h 59m, p. m., 1. m. t., I set off $37^{\circ} 33'$. N. on the lat. arc, $23^{\circ} 03' 30''$ N. on the decl. arc, and at the cor. of secs. 2, 3, 34 and 35, determine the meridian with the solar.

Thence I run

S. $89^{\circ} 48'$ W., bet. secs. 3 and 34.

Over rolling mesa, covered with scattering scrub cedar timber.

1.00 Start desc. over broken W. slope of mesa.

5.00 Dry draw, 20 lks. wide, drains S.; asc.

(9)

North Boundary of T. 38 S., R. 23 E.

Chains.

- 9:00 Leave scrub cedar timber, bears N. and S.
- 10.00 Top of ridge, bears N. and S.; desc.
- 14.00 Dry draw, 2 chs. wide, 10 lks. deep, drains SW.; asc.
- 17.00 Start abrupt asc. over broken E. slope of mesa, bears N. and S.
- 34.00 Top of asc., edge of mesa, bears NE. and SW.; enter scrub cedar timber.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
- $\frac{1}{4}$
S 34

S 3
1912
- Dig pits, 18x18x12 ins., E. and W. of post., 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 80.00 Set an iron post, 3 ft. long, 3 in. in diam., 24 ins. in the ground for the cor. of secs. 3, 4, 33 and 34, with brass cap mkd.

T 37 S R 23 E
S 33 | S 34

S 4 | S 3
T 38 S
1912

Raise a mound of stone, 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Land, broken and rolling. Soil, sandy loam on mesa, adobe on slopes; 2nd and 4th rates. Timber, scattering scrub cedar June 10, 1912.

June 11: At 8h 59m, a. m., 1. m. t., I set off $37^{\circ} 33'$ N. on the lat. arc, $23^{\circ} 06' 30''$ N. on the decl. arc, and at the cor. of secs. 3, 4, 33 and 34, determine the meridian with the solar.

Thence I run

S. $89^{\circ} 48'$ W., bet. secs. 4 and 33.

Desc. gradually over rolling mesa, covered with scattering scrub cedar timber, and sage brush undergrowth.

- 20.00 Start abrupt desc. over broken W. slope of mesa, covered with loose slide rock, bears NE. and SW.

North Boundary of T. 33 S., R. 23 E.

Chains.

- 35.00 Leave scattering scrub cedar timber, bears NE. and SW.
 39.00 Foot of abrupt desc., bears NE. and SW.; enter nearly level bottom land, covered with sage brush undergrowth.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$$\begin{array}{c} \frac{1}{4} \\ \text{S } 33 \\ \hline \text{S } 4 \end{array}$$

1912

- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
 63.00 Dry draw, 1 ch. wide, 5 lks. deep, drains SW.; asc. gradually
 75.00 Dry draw, 50 lks. wide, 7 lks. deep, drains SE.
 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 4, 5, 32 and 33, with brass cap mkd.

$$\begin{array}{c} \text{T } 37 \text{ S R } 23 \text{ E} \\ \text{S } 32, \quad | \quad \text{S } 33 \\ \hline \text{S } 5 \quad | \quad \text{S } 4 \\ \text{. T } 38 \text{ S} \end{array}$$

1913

- Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 Land rolling and broken.
 Soil, sandy loam on mesa; gravel and clay in bottom land;
 2nd and 4th rates.
 Timber, scattering scrub cedar. Undergrowth, sagebrush.

June 11: At 11h 59m, a. m., l. m. t., I set off $23^{\circ} 07'$ N. on the decl. arc, and at the cor. of secs. 4, 5, 32 and 33 observe the sun on the meridian, the resulting lat. is $37^{\circ} 33'$ N.

Thence I run

S. $89^{\circ} 48'$ W., bet. secs. 5 and 32.

Over rolling bottom land, covered with sage brush undergrowth.

- 22.00 Dry draw, 50 lks. wide, drains S.
 33.00 Enter cedar timber, bears N. and S.; asc. over E. slope of ridge, over a series of small ridges and ravines, covered with large sand stone boulders.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor. with brass cap mkd.

North Boundary of T. 38 S., R. 23 E.

Chains.

	1
S 32	
<hr/>	
S 5	

1912

Raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

41.00 Top of ridge, bears N. and S.; desc. abruptly.

60.00 Dry draw, 30 lks. wide, drains S.; asc. abruptly over broken E. slope of mesa.

70.50 Top of mesa, bears N. and S.; continue over nearly level land.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 5, 6, 31 and 32, with brass cap mkd.

T 37 S R 23 E	
S 31 | S 32	
<hr/>	
S 6 | S 5	
T 38 S	

1912

From which

A cedar, 14 ins. in diam., bears N. 39° E., 7 lks. dist.; mkd. T37S R23E S32 BT.A cedar, 30 ins. in diam., bears S. 74° E., 69 lks. dist.; mkd. T38S R23E S5 BT.A cedar, 16 ins. in diam., bears S. 37° W., 113 lks. dist.; mkd. T38S R23E S6 BT.A cedar 14 ins. in diam., bears N. 22° W., 91 lks. dist.; mkd. T37S R23E S31 BT.

Land rolling and broken.

Soil, sandy loam on mesa, clay and adobe on slopes; 2nd and 4th rates.

Timber, cedar. Undergrowth, sagebrush.

Thence I run

S. $89^\circ 48'$ W., bet. secs. 6 and 31.

Over rolling mesa, covered with scattering scrub cedar timber.

10.00 Start abrupt desc., bears N. and S.

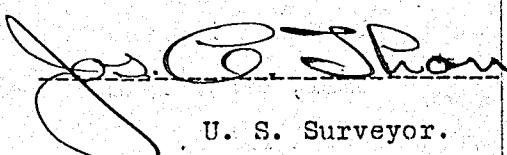
32.00 Dry draw, 20 lks. wide, drains S.; asc. over broken E. slope of mesa.

North Boundary of T. 38 S., R. 23 E.

Chains.	
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 34 ins. in the ground for the $\frac{1}{4}$ sec, cor., with brass cap mkd.
	$\frac{1}{4}$ S 31
	S 6'
	1912
	Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
45.00	Top of mesa, bears N. and S.; leave cedar timber, enter open sage brush mesa.
77.46	The cor of Tps. 37 and 38 S., Rgs. 22 and 23 E., previously described. Land, rolling and broken. Soil, sandy loam on mesa, clay and adobe on slopes; 1st and 4th rates. Undergrowth, sagebrush. Timber, scattering scrub cedar June 11, 1912.

Latitude and departures and closing errors.

Line	Bearing	Dist.	Latitudes		Departures.	
			N.	S.	E.	W.
Colo. G. M.	N:0° 10'E.	479.58	479.58	...	1.40	...
No. Bdy.	N.89°48'E.	477.46	1.67	...	477.46	...
E. Bdy.	South	480.00	...	480.00	...	...
So. Bdy.	N.89°58'W.	479.16	...	.88	...	479.16
	Convergency	.55	...	...	.55	...
Totals	...	481.35	480.88	479.41	479.16	
Error in lat.	...	480.328		479.16		
		.97	in dep.	.25		



J. C. Shaw
U. S. Surveyor.

For oath of U.S. Surveyor, and certificate of assistants,
see Book "V" of this group.

BOOK A-412

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability,
....., U. S. Surveyor, during the periods and in the capacities
stated opposite our several signatures, in surveying all those parts or portions of

For certificate of assistants see book "V" T.39 S., R.26 E.

the Meridian, in the State of

which are represented in the foregoing field notes as having been executed by him, and under his direction; and that said survey has been, in all respects, to the best of our knowledge and belief, well and faithfully executed.

Subscribed and certified to before me on the dates of the final service as shown above.

FINAL OATH OF UNITED STATES SURVEYOR.

I, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for bearing date of the day of , 191 , I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of

For final oath of U.S. Surveyor see book "V" T.39 S., R.26 E.

..... of the Meridian, in the State of , which are represented the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for and in the specific manner described in the field notes, and the foregoing are the original field notes of such survey.

U. S. Surveyor

Subscribed by said , and sworn to before me }
this day of , 191 }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 2 , 191

The foregoing field notes of the survey of the North and East Boundaries of Township No. 38 South, Range No. 23 East of the Salt Lake Base and Meridian, Utah,

executed by Joseph C. Thoma

under his special instructions dated March 26 , 191 2, having been critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

U. S. Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in , has been correctly copied from the original notes on file in this office.

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BOOK A-412

Filed Jul 1 1913

E. R.

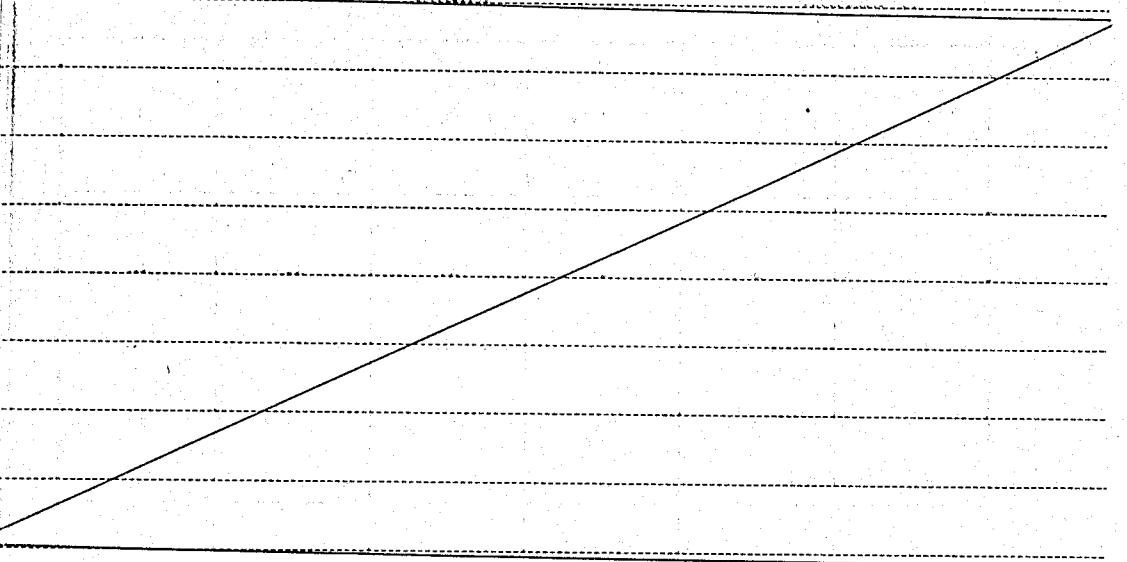
FIELD NOTES

OF THE SURVEY OF THE

S U B D I V I S I O N A L L I N E S

O F

T. 38 S., R. 23 E.



Of the Salt Lake Base and Meridian,

the State of U. T. A. H.

EXECUTED BY

Daniel B. Miller and Jos. C. Thoma,

the capacity of U. S. Surveyor's, under instructions dated March 26th, 1912,
ed by the United States Surveyor General to govern surveys included in
up No. 16, which were approved by the Commissioner of the General Land
ce, April 2, 1912

Survey commenced June 12th, 1912.

Survey completed June 29th, 1912.

BOOK A-412

INDEX DIAGRAM.

Township *Range*

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
80	29	28	27	26	25
81	82	83	84	85	86

Subdivision of T. 38 S., R. 23 E.

Chains.

Survey commenced June 12, 1912, and executed with a Young & Sons light mountain transit No. 8146. For test of instrument see Book of the field notes of the boundaries of T. 39 S., R. 23 E.

June 12: At 8h 0m, a. m., l. m. t., I set off $37^{\circ} 28' N.$ on the lat. arc, $23^{\circ} 10' 30'' N.$ on the decl. arc, and at the cor. of secs. 1, 2, 35 and 36, heretofore described, determine a meridian with the solar.

Thence I run

N. $0^{\circ} 01'$ W. bet. secs. 35 and 36.

Over rolling mesa, covered with sage brush undergrowth.

- 13.00 Dry draw, 10 lks. wide, drains SW.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	
S 35	S 36

1912

Dig pits, $18 \times 18 \times 12$ ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 25, 26, 35 and 36, with brass cap mkd.

T 38 S R 23 E	
S 26	S 25
<hr/>	
S 35	S 36

1912

Dig pits, $18 \times 18 \times 12$ ins. in each sec., $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, gently rolling.

Soil, sandy loam; 1st rate.

No. timber. Undergrowth, sagebrush.

 Thence I run

S. $89^{\circ} 58'$ E. on a random line bet. secs. 25 and 36.

- 40.00 Set temp $\frac{1}{4}$ sec. cor.

79.90 Intersect the E. bdy. of Tr. 30 lks. S. of cor. secs. 25, 30,

Subdivision of T. 38 S., R. 23 E.

Chains. 31 and 36, heretofore described.

Thence 1 rm.

S. 89° 53' W. on a true line bet. secs. 23 and 36.

Over level mesa covered with sage brush undergrowth.

29.95 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap md.

$\frac{1}{4}$
S 25

S 36

1912

Dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.

30.00 The cor. of secs. 25, 26, 35 and 36.

Land, gently rolling.

Soil, sandy loam; 1st rate.

No timber. Undergrowth, sagebrush.

June 12: Cloudy at noon, unable to observe the sun for lat.

Thence 1 rm.

S. 0° 01' W., bet. secs. 25 and 26.

Over rolling mesa covered with sage brush undergrowth;

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap md.

$\frac{1}{4}$
S 26 | S 25

1912

Dig pits, 18x18x12 ins. N. and S. of post 3 ft. dist.; and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

49.00 Dry draw, 10 lbs. wide, drains SW.

50.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 23, 24, 25 and 26, with brass cap md.

T 38 S R 23 E

S 23 | S 24

S 24 | S 25

1912

Subdivision of T. 38 S., R. 23 E.

Chains.

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land, rolling.

Soil, sandy loam; 1st rate. No timber. Undergrowth sagebrush.

Thence I run

N. $89^{\circ} 53'$ E., on random line bet. sec. 24 and 25.

40.00

Set temp $\frac{1}{4}$ sec. cor.

79.94

Intersect the East bdy. of Tp. at the cor. of secs. 19, 24, 25 and 30, heretofore described.

Thence, S. $89^{\circ} 53'$ W., on true line bet. secs. 24 and 25.

Over rolling mesa, covered with sage brush undergrowth, and scattering scrub cedar timber.

31.77

Dry draw, 10 lks. wide, drains NE.

20.00

Dry draw, 10 lks. wide, drains NE.

30.00

Leave scattering scrub cedar timber, bears NW. and SE.; continue over open mesa, covered with sage brush undergrowth.

39.97

Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.S 24S 25

1912

Dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

79.94

The cor. of secs. 23, 24, 25 and 26.

Land, rolling.

Soil, sandy loam; 1st rate.

Timber, scrub cedar.

Undergrowth, sagebrush.

June, 12, 1912.

June 13: At 8h Om, a. m., 1. m. t., I set off $37^{\circ} 29'$ $30''$ N. on the lat. arc, $23^{\circ} 14'$ N. on the decl. arc, and at the cor. of secs. 23, 24, 25 and 26, determine the meridian with the solar.

Thence I run

Subdivision of T. 38 S., R. 23 E.

Chains.

N. $0^{\circ} 01'$ W., bet. secs. 23 and 24.

Over rolling mesa, covered with scattering sage brush undergrowth.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S	$\frac{1}{4}$	S 23	S 24
---	---------------	------	------

1912

Dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

60.00 Enter scattering scrub cedar timber, bears NE. and SW.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 13, 18, 23 and 24, with brass cap mkd.

T 38 S R 23 E

S 14 | S 13

S 23 | S 24

1912

Dig pits, 18x18x12 ins., in each sec., $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, sandy loam; 1st rate.

Timber, scrub cedar. Undergrowth, sagebrush.

Thence I run

N. $89^{\circ} 53'$ E., on random line, bet. secs. 13 and 24.40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.95 Intersect the East bdy. of Tp. 5 lks. N. of the cor. of secs. 13, 18, 19 and 24, heretofore described.

Thence, S. $89^{\circ} 55'$ W., on true line bet. secs. 13 and 24.

Over rolling bottom land, covered with sage brush and scattering scrub cedar timber.

10.00 Enter Alkali Wash (dry), sandy bottom, 2 lks. deep, drains SE.

16.00 Leave Alkali Wash; asc. over broken E. slope of mesa.

39.97 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in

Subdivision of T. 38 S., R 23 E.

Chains.

the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd..S 13

S 24

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

49.00 Rim rock, 30 ft. high, bears N. and S.; asc. gradually over broken mesa.

56.00 Enter nearly level open mesa covered with sage brush undergrowth.

79.95 The cor. of secs. 13, 14, 23 and 24.

Land rolling and broken.

Soil, sandy loam on mesa, sand in bottom land and clay and stony on slope; 1st and 4th rates.

Timber, scattering scrub cedar. Undergrowth, sagebrush.

June 13: At 12h On, 100m. noon, I set off $23^{\circ} 14' N.$ on the decl. arc, and at the cor. of secs. 13, 14, 23 and 24, observe the sun on the meridian, the resulting lat. is $37^{\circ} 31' N.$

Thence I run

N. $0^{\circ} 01' W.$, bet. secs. 13 and 14.

Over rolling mesa, covered with scattering scrub cedar timber and sage brush undergrowth.

38.00 Start gradual desc., bears E. and W.

39.00 Dry draw, 16 lks. wide, drains W.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd..S 14 S 13

1912

From which

A cedar, 12 ins. in diam., bears N. $40^{\circ} E.$,
176 lks. dist.; mkd. $\frac{1}{4}$ S 13 BT.A cedar, 14 ins. in diam., bears S. $37^{\circ} W.$,
41 lks. dist.; mkd. $\frac{1}{4}$ S 14 BT.

42.00 Dry draw, 10 lks. wide, drains SW.; asc.

Chains.

- 71.00 Start abrupt desc. over rim rock 30 ft. high, bears E. and NW.; thence continue desc. over broken N. slope over a series of ridges and ravines.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 11, 12, 13 and 14, with brass cap mkd.

T 38 S R 23 E

S 11	S 12
S 14	S 13

1912

From which

A cedar, 18 lns. in diam., bears N. 23° E.,
58 lks. dist.; mkd. T38S R23E S12 BT.

A cedar, 20 ins. in diam., bears S. 23° E.,
47 lks. dist.; mkd. T38S R23E S13 BT

A cedar, 15 ins. in diam., bears S. 55° W.,
53 lks. dist.; mkd. T38S R23E S14 BT

A cedar, 20 ins. in diam., bears N. $54^{\circ}30'W.$,
26 lks. dist.; mkd. T38S R23E S11 BT.

Land, rolling and broken.

Soil, sandy loam on mesa, adobe and clay on the slope;

1st and 4th rates.

Timber, scrub cedar. Undergrowth, sagebrush.

Thence I run

N. $89^{\circ} 55'$ E., on random line bet. secs. 12 and 13.40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.03 Intersect the East bdy. of Tp. at the cor. of secs. 7, 12, 13 and 14, heretofore described.

Thence, S. $89^{\circ} 55'$ W., on true line bet. secs. 12 and 13.

Desc. over broken E. slope of Alkali Canon, covered with scattering scrub cedar timber.

24.00 Leave scattering scrub cedar timber, bears NE. and SW.; continue desc. over rocky broken slope.

32.00 Alkali Wash, (dry) 2 chs. wide, 3 lks. deep, drains S.; asc. over broken land.

40.01 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in

Subdivision of T. 38 S., R. 23 E.

Chains.

the ground for the $\frac{1}{4}$ sec. cor. with brass cap mkd. $\frac{1}{4}$
S 12S13
1912Raise a mound of stone. 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

41.00

Enter scattering scrub cedar timber, bears NE. and SW.

80.03

The cor. of secs. 11, 12, 13 and 14.

Land broken.

Soil, sandy and adobe covered with large boulders on the slopes; 4th rate.

Timber, scattering scrub cedar.

June 13, 1912.

 June 14: At 9h 0m, a. m., l. m. t., I set off $37^{\circ} 31'$ N.
 on the lat. arc, $23^{\circ} 17'$ N. on the decl. arc, and at
 the cor. of secs. 11, 12, 13 and 14, determine the
 meridian with the solar.

Thence I run

N. $0^{\circ} 01'$ W., bet. secs. 11 and 12.

Desc. over N. slope of mesa, through scattering scrub cedar timber.

16.00

Foot of broken N. slope, bears NW. and SE.; leave scattering scrub cedar timber.

32.00

Dry draw, 30 lks. wide, 10 lks. deep, drains E.

40.00

Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
 $\frac{1}{4}$
 S 11 | S 12
 1912
Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

48.00

Start asc. over SE slope of mesa, over a series of ridges and ravines.

78.00

Enter scattering scrub cedar timber, bears NE. and SW.

80.00

Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 1, 2, 11 and 12, with brass cap mkd.

 T 38 S R 23 E
 S 2 | S 1
 ---+---
 S 11 | S 12

1912

Chains.

- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Land, rolling and broken.
- Soil, adobe and stony; 4th rate.
- Timber, scrub cedar.
- June 14; 12h noon, 1, m. t., I set off $23^{\circ} 17'$ N. on the decl. arc, and at the cor. of secs. 1, 2, 11 and 12, observe the sun on the meridian, the resulting lat. is $37^{\circ} 32'$ N.
-
- Thence I run
- N. $89^{\circ} 55'$ E., on random line bet. secs. 1 and 12.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.08 Intersect the E. bdy of the twp. 2 lks. S. of the cor. of secs. 1, 6, 7 and 12, heretofore described.
- Thence S. $89^{\circ} 54'$ W. on true line bet. secs. 1 and 12.
- Desc. over broken E. slope of Alkali Canon.
- 39.00 Alkali Wash, (dry) 50 lks. wide, 15 lks. deep, drains S; asc. over broken W. slope covered with scattering scrub cedar timber.
- 40.04 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cpr., with brass cap mkd.
- $\frac{1}{4}$
S 1
S 12
1912
- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 80.08 The cor. of secs. 1, 2, 11 and 12.
- Land rolling and broken,
- Soil, adobe and covered with boulders.
- Timber, scattering scrub cedar.
-
- Thence I run
- N. $0^{\circ} 01'$ W., on random line bet. secs. 1 and 2.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.88 Intersect the N. bdy, Twp. 7 lks. E. of the cor. of secs. 1, 2, 35 and 36, heretofore described.
- Thence S. $0^{\circ} 04'$ E. on true line bet. secs. 1 and 2.

Subdivision of T. 38 S., R 23 E.

Chains.

Desc. over rolling open land covered with gresawood undergrowth..

59.88 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd..

$\frac{1}{4}$	S 2	S 1
		✓
		1912

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

59.80 Enter scattering scrub cedar timber, bears NW. and SE.; asc. over broken E. slope of mesa.

72.00 Top of ridge of mesa, projects N.; desc.

79.88 The cor. of secs. 1, 2, 11 and 12.

Land rolling and broken.

Soil, sandy and gravel; 4th rate.

Timber, scrub cedar.

Undergrowth, greasewood. . . June 14, 1912.

June 17: At 8^h 01^m, a. m., 1. m. t., I set off $37^{\circ} 28'$ N. on the lat. arc, $23^{\circ} 24' 30''$ N. on the decl. arc, and at the cor. of secs. 2, 3, 34 and 35, on the E. bdy. of the Tp., heretofore described, determine a meridian with the solar. Thence I run

N. $0^{\circ} 01'$ W. bet. secs. 34 and 35.

Asc. over rolling open mesa, covered with sage brush undergrowth.

2.00 Bluff-Dolores load, bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	S 34	S 35
		✓
		1912

Dig pits, 18x18x12 ins. N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

56.00 Enter scrub cedar timber, bears NE. and SW.

60.00 Start gradual desc., nears E. and W.

Subdivision of T. 38 S., R. 23 E.

(10)

Chains.	
68.00	Dry draw, 15 lks. wide, drains W.; asc.
72.00	Top of asc., bears E. and W.; desc..
78.50	Dry draw, 10 lks. wide, drains W.; asc.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 26, 27, 34 and 35, with brass cap mkd.

T 38 S R 23 E

S 27	S 26
S 34	S 35

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of co
Land, rolling. Undergrowth sagebrush.

Soil, sandy loam; 1st rate. Timber, scrub cedar.

Thence I run

S. $89^{\circ} 58'$ E., on random line bet. secs. 26 and 35.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.06 Intersect the N. and S. lines 20 lks. S. of cor. secs. 25, 26,
35 and 36.

Thence, S. $89^{\circ} 53'$ W., on true line bet. secs. 26 and 35.
Desc. gradually over open sage brush mesa.

40.03 Set an iron post, 3 ft. long 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 26

S 35

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of co
49.00 Leave rolling open sage brush mesa, bears N. and S.; ent
dense scrub cedar timber, continue over broken gradual
slope.

52.00 Dry draw, 10 lks, wide, drains SW. thence W.

80.06 The cor. of secs. 26, 27, 34 and 35.

Land, rolling and broken.

Soil, sandy loam; 1st rate.

Timber, scrub cedar. Undergrowth, sagebrush.

Subdivision of T. 38 S., R. 23 E.

Chains.

June 17: At 12h 01m, p. m., 1. m. t., I set off $23^{\circ} 24' 30''$ N. on the decl. arc, and at the cor. of secs. 26, 27, 34 and 35, observe the sun on the meridian, the resulting lat. is $37^{\circ} 29'$ N.

Thence I run

N. $0^{\circ} 01'$ W., bet. secs. 26 and 27.

Asc. over-broken mesa land covered with scattering scrub, cedar timber and sage brush undergrowth.

- 4.00 Top of asc., bears E. and W.; desc.
- 8.00 Dry draw, 5 lks. wide, drains W.; asc.
- 10.00 Top of asc., bears E. and W.; desc.
- 21.50 Dry draw, 50 lks. wide, drains W.; asc.
- 32.00 Top of asc., bears NE. and SW.; continue over level mesa land.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$ S 27 | S 26 ✓

1912

From which

A cedar, 15 lns. in diam., bears S. 38° E.,
20 lks. dist.; mkd. $\frac{1}{4}$ S 26 BT.

A cedar, 18 ins. in diam., bears S. $30^{\circ} 30'$ W.,
62 lks. dist.; mkd. $\frac{1}{4}$ S 27 BT.

- 52.00 Edge of mesa, bears NE. and SW.; desc. abruptly.
- 60.00 Bottom of canon, drains SW.; asc. abruptly.
- 64.00 Top of asc.; point of mesa, projects SW.
- 77.00 Head of draw, drains SW.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 22, 23, 26 and 27, with brass cap mkd.

T 38 S R 23 E

S 22 | S 23

$\frac{1}{4}$ S 27 | S 26

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land rolling and broken.

Chains.	Soil, sandy and stony; 3rd rate. Timber, scrub cedar. Undergrowth, sagebrush.
<hr/>	
	Thence I run N. $89^{\circ} 53'$ E., on random line bet. secs. 23 and 26.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.18	Intersect the N. and S. line, 2 lks. N. of the cor. of secs. 23, 24, 25 and 26. Thence, S. $89^{\circ} 54'$ W., on true line bet. secs. 23 and 26. Desc. gradually over rolling open sage brush mesa.
16.20	Enter scattering scrub cedar timber, bears NE. and SW.
40.09	Set an iron post, 3 ft. long, 1 ins in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
	$\frac{1}{4}$ S 23 <hr/> S 26
	1912
	Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
56.20	Edge of rolling mesa, bears NE. and SW.; desc. gradually, over broken land covered with scattering scrub cedar timber.
72.00	Dry draw, 1 ch. wide, drains SW.; asc.
75.00	Cross head of canon, drains SW.
80.18	The cor. of secs. 22, 23, 26 and 27. Land, rolling and broken. Soil, sandy loam, 1st rate. Timber, scrub cedar. Undergrowth, sagebrush.
	June 17, 1912.
<hr/>	
	June 18: At 8h 01m, a. m., 1. m. t., I set off $37^{\circ} 29' 30''$ N. on the lat. arc, $23^{\circ} 26'$ N. on the decl. arc, and at the cor. of secs. 22, 23, 26 and 27, determine the meridian with the solar.
	Thence I run N. $0^{\circ} 01'$ W., bet. secs. 22 and 23. Over rolling mesa, covered with scattering scrub cedar timber.

Subdivision of T. 38 S., R. 23 E.

Chans.

15.00

Dry draw, 10 lks. wide, drains SE.; asc.

40.00

Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	
S 22	S 23

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

56.00

Edge of mesa, bears E. and W.; desc. abruptly over S. slope
of canon.

60.00

Dry draw, 20 lks. wide in bottom of canon, drains W.

64.00

Top of asc.; point of mesa, projects W.; Desc.

72.00

Dry draw, 50 lks. wide, drains W.; asc.

80.00

Set an iron post, 3 ft. long 2 ins. in diam., 24 ins. in
the ground for the cor. of secs. 14, 15, 22 and 23,
with brass cap mkd.

T 38S R23E

S 15	S 14
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S 22	S 23
------	------

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land, rolling and broken.

Soil, sandy loam; 1st rate.

Timber, scrub cedar.

Thence I run

N. $89^{\circ} 54'$ E., on random line bet. secs. 14 and 23.

40.00

Set temp. $\frac{1}{4}$ sec. cor.

80.12

Intersect the N. and S. line, 5 lks. S., of the cor. of
secs. 13, 14, 23 and 24.Thence S. $89^{\circ} 52'$ W. on true line bet. secs. 14 and 23.Over rolling mesa, covered with scattering scrub cedar
timber.

40.06

Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	
S 14	

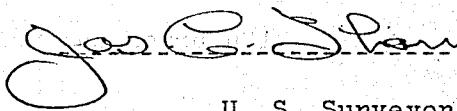
S 23	
1912	

Subdivision of T. 38 S., R. 23 E.

Chains. 35.00	Raised round of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
66.00	Dry draw 20 lks. wide, drains SW.
80.12	The cor. of secs. 14, 15, 22 and 23: Land, rolling. Soil, sandy loam; 1st rate. Timber, scrub cedar.

June 18^m 1912.

June 18: At this cor. I set off $23^{\circ} 26'$ N. on the decl. arc and at app. noon observe the sun on the meridian, the resulting lat. is $37^{\circ} 31'$ N.



U. S. Surveyor

Subdivision of T.38 S., R.23 E.

- Chains. June 21, 1912: At 8h a.m.l.m.t., I set off $37^{\circ} 38' 30''$ on the lat.arc; $23^{\circ} 28' N.$ on the decl.arc at my Polaris station in sec.34, and find the meridian thus secured falls on the point set for my Polaris meridian May 25 at my camp in this township.
- For establishment of this Polaris meridian, see field notes of T.39 S., R.23 E., book C. of this group.
- No change of my camp or Polaris meridian having been made; and having made frequent tests of my solar apparatus on the Polaris meridian, at a.m. and p.m. hours, as well as noon tests for verification of instrumental latitude adjustment; and finding them at all times satisfactory, I conclude it to be unnecessary to establish a new meridian, or report the full proceedings of establishment of the same.
- June 21: At 9 a.m.l.m.t., I set off $37^{\circ} 30' 30''$ on the lat.arc and $23^{\circ} 27' N.$ on the decl.arc; and determine a meridian at the corner of secs.14,15,22, and 23.
- Thence $N.0^{\circ} 1' W.$ between secs.14 and 15,
- Over broken W.slope of canon; through dense scrub cedar.
- Gradual desc.from cor.
- 7.50 Descend abruptly 150 ft. Leave cedars.
- 15.50 Dry gulch, drains W.; ascend 150 ft.
- 25.00 Point of mesa & spur NE. & SE., projects W. Desc. abrupt NW.slope 100 ft.
- 36.75 Wash, 20 lks.wide, cse.W. Asc.50 ft.
- 40.00 Set an iron post, 3 ft.long, 1 in.in dia., 24 ins.in mound cf earth and stone, (impossible to set post full length in ground, on account of subsurface stone) for $\frac{1}{4}$ sec.cor., with brass cap marked
- $\frac{1}{4}$ S 15 | S 14
1912
- raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of cor.
- Trees too scrubby to mark. Continued ascent.
- 44.00 Point of mesa from E.brs.NE. & SE. projects W.
- Desc.125 ft.

Subdivision of T.38 S., R.23 F.

Chains.
 54.00 Dry gulch, cse. W.; asc. 75 ft.
 57.00 Edge of mesa, brs. W. & SE.
 63.50 Edge of mesa NE. & W. Desc.
 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in
 mound of earth and stone (subsurface stone preventing setting post firmly in the ground) for the corner of secs. 10, 11, 14, and 15, with a brass cap marked

T 38 S	R 23 F
S 10	S 11
S 15	S 14

1912

raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of corner.

A scrub cedar, 12 ins. dia., S. 65° W. 8 lks. dist. marked T 38 S R 23 F S 15 B T

A scrub pinon 12 ins. in dia., S. 62° E. 59 lks.

dist., marked T 38 S R 23 F S 14 B T
Land, broken.

Soil, thin, sandy soil surface, very poor; 4th rate.
Timber, scrub cedar and pinon, scattering gth.

June 21: At this corner at 12h 0m 30s 1.m.t., I set off $23^{\circ} 28'$ N. on the decl. arc; and observe the sun on the meridian, the observed lat. is $37^{\circ} 31'$, which is correct, nearly.

Subdivision of T.38 S.R.23 E.

Chains.

N. $89^{\circ}53' E.$, on random line bet. secs. II and I4.

- 40.00 Set temp. $\frac{1}{4}$ sec.corner.
- 80.10 Intersect the N. & S.line 2 lks.S.of the corner of secs. II, I2, I3 and I4.
Thence I run,
S. $89^{\circ}51' W.$ on true line bet. secs. II and I4.
Over broken canon surface, through scrub cedar & pinon,
gradually ascending along the W.side of canon. over small
draws and wash ridges.
- 22.00 Begin abrupt asc.
- 27.75 Edge of mesa, over sandstone ledge, cse. N. & S. 100 ft.
above the sec.cor. Desc. gradually over short sage brush.
- 40.05 Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the
ground for the $\frac{1}{4}$ sec.cor. with brass cap marked

S. II
S. I4
1912

dig pits 18 X 18 X 12 ins. E & W. of the post, 3 ft. dist.
raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.

Trees in limits too scrubby to mark for B.Ts.

- 52.00 Leave short sage brush, brs. N&S. enter scat. cedars.
- 60.00 Gulch, dry, cse. NW. 15 lks. wide. asc.
- 77.75 Edge of mesa, brs. NE. & SW. desc. abruptly. 60 ft.
- 80.10 The corner of secs. I0, II, I4 and I5.
Land, broken.
Soil, poor, light sandy loam.
Timber, scat. scrub cedar and pinon.
Undergrowth, short sage brush, 24.50 chs.
Scant grazing.

June 21st, 1912.

Subdivision of T.38 S.R.23 E.

Chains.

June 22: At 10; A.m.l.m.t. I set of $37^{\circ}31'$ on the lat.arc. and $23^{\circ}27'30''$ N. on the dec.arc and determine a meridian with the solar, at the cor.of secs. IO, II, I4 and I5.

Thence I run

N. $0^{\circ}01'$ W. bet. secs. IO and II.

Over broken surface, through dense cedar and pinon.

I.50 Gulch, dry, 20 lks. wide cse. SW. asc.

.4.50 Edge of mesa, brs., NE. & SW. thence across mesa neck.

30.00 N. edge of mesa neck, brs. W & SE. desc. over broken slope.

38.00 Leave timber, enter open slightly rolling grass land, NW. and SE.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the ground for the $\frac{1}{4}$ sec.cor. with brass cap marked

$\frac{1}{4}$	S IO	S II
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1912

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.

53.00 Wash, 15 lks. wide, cse. SE.

67.00 Wash, 10 lks. wide, 3 ft. deep, cse. E.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in mound of stone and earth, on bed rock base, for the cor. of secs. 2, 3, IO and II with a brass cap marked

T 38 S | R 23 E
S 3 | S 2
S IO | S II

1912

raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.

No bees in distance fit for marking, for B.Ts.

Land, broken and rolling.

Soil, thin sand surface on sandstone bed rock.

Timber, scrub cedar and pinon.

Scant grazing.

Subdivision of T.38 S.R.23 E.

Chains. June 22: I set off $23^{\circ}27'30''$ N.on the dec.arc at apparent noon and observe the sun on the meridian, at the cor.of secs.2,3,10 and II. and obtain a reading of $37^{\circ}32'$ on the lat.arc, which is approximately correct.

Thence I run

$N.89^{\circ}51'E.$ on random line bet.secs.2 and II.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

80.06 Intersect the N&S.line, 2 lks.N.of the cor.of secs.I,2, II and I2.

Thence $S.89^{\circ}52'1\frac{1}{2}W.$ on true line bet.secs.2 and II.

Over S.slope of mesa breaks. Broken sharp ridges & washes.

20.00 Rocky spur, projects S.desc.grad.Cedar & pinon scattered.

40.03 Set an iron post 3 ft.long, 1 in.in dia., 24 ins.in earth and stone, for the $\frac{1}{4}$ sec.cor.with brass cap marked

$\frac{1}{4}$
S 2 ✓
S II
1912

raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high N.of the cor.

Trees in distance, too scrubby for marking.

57.00 Remains of prehistoric mesa ruin on line.

64.00 Wash,dry, 10 lks.wide,cse.S.

80.06 The cor.of secs.2,3,10 and II.

Land broken.rocky, and washed slope, facing S.

Soil,poor,bad land and stony.4th,rate.

Timber,scat.scrub cedar & pinon.Scant grazing.

Thence $N.0^{\circ}1'W.$ on random line bet.secs.2 and 3.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

79.58 Intersect the N.bdy.of the township, 23 lks.W.of the cor.of secs.2,3,34 and 35, heretofore described.

Thence $S.0^{\circ}09'E.$ on true line bet.secs.2 and 3.

Over broken cedar & pinon mesa.dense growth.

39.58 Set an iron post 3 ft.long, 1 in.in dia., 24 ins.in the ground,for the $\frac{1}{4}$ sec.cor with brass cap mkd.

Subdivision of T. 38 S.R. 23 E.

Chains.		$\frac{1}{4}$ S 3 | S 2	
		1912	
	raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.		
	Trees in limits too scrubby to mark.		
55.00	Desc. broken SW. slope, from mesa. brg, NW. & S. 80° E.		
79.00	Remains of several prehistoric cliff ruins, on line.		
79.58	The cor. of secs. 2, 3, 10 and 11.		
	Land broken.		
	Soil, stony and poor, 4th, rate.		
	Timber, scrub cedar & pinon.		
	Scant grazing.		
	At this cor. at 2:30, p.m. l.m.t. I set off $37^{\circ} 32'$ on the lat. arc; $23^{\circ} 27' 30''$ N. on the decl. arc, and determine a mer. with the solar.		
	June 22, 1912.		
	Daniel B. Miller.		
	U.S. Surveyor.		
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	June 19: At 8h 31m, a. m., l. m. t., I set off $37^{\circ} 28'$ N. on the lat. arc, $23^{\circ} 27'$ N. on the decl. arc, and at the cor. of secs. 3, 4, 33 and 34, determine the meridian with the solar.		
	Thence I run, from said sec.cor. as heretofore described, N. $0^{\circ} 02'$ W. bet. secs. 33 and 34.		
	Asc. over rolling mesa, covered with sage brush under-growth.		
6.00	Drw draw, 8 lks. wide, drains W.; asc.		
11.50	Bluff-Dolores, road, bears E. and W.		
28.00	Head of canon, 4 chs. wide, drains W.		
38.00	Start abrupt desc. over rim rock, 50 ft. high, bears NE. and SW.		
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mdk.		
	$\frac{1}{4}$ S 33 | S 34		
	1912		

Subdivision of T. 38 S., R. 23 E.

Chains.

- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 52.00 Bottom of abrupt desc., bears NE. and SW., continue over level land.
- 71.00 Dry draw, 50 lks. wide, drains SW.; asc. gradually.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 27, 28, 33 and 34, with brass cap mkd.

T 38 S R 23 E

S 28	S 27
S 33	S 34

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Land, rolling and broken. Soil, sandy loam and stony; 1st and 4th rates. No timber. Undergrowth, sagebrush.

Thence I run

S. $89^{\circ} 56'$ E., on random line bet. secs. 27 and 34.40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.01 Intersect the N. and S. line, 15 lks. S. of the cor. of secs. 26, 27, 34 and 35.

Thence, S. $89^{\circ} 56'$ W. on true line bet. secs. 27 and 34. Desc. over broken mesa land, along breaks of a dry draw; through scattering scrub cedar timber.

4.00 Dry draw, 20 lks. wide, drains NW.; asc.

16.00 Dry draw, 50 lks. wide, drains NW.

20.00 Spring of clear cold water, 2 chs. N. of line.

24.00 Dry draw, 50 lks. wide, drains N.

40.005 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd. $\frac{1}{4}$
S 27

S 34

1912

Dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Subdivision of T. 38 S., R. 23 E.

Chains.

- 54.00 Start abrupt desc., bears E. and SW.; leave scrub cedar timber.
- 58.00 Bottom of abrupt desc.; dry draw, 1 ch. wide, drains SW.; asc. gradually over sandy bottom land.
- 73.00 Dry draw, 50 lks. wide, drains SW.
- 80.01 The cor. of secs. 27, 28, 33 and 34.
Land brokem.
Soil, sandy and stony; 4th rate.
Timber, scattering scrub cedar.

June 19, 1912

June 20: At 8h 0lm, a. m., 1. m. t., I set off $37^{\circ} 28' 30''$ N. on the lat. arc; $23^{\circ} 28'$ N. on the decl. arc, and at the cor. of secs. 27, 28, 33 and 34, determine the meridian with the solar.

Thence I run

N. $0^{\circ} 02'$ W., bet. secs. 27 and 28.

Asc. over SE. slope, covered with greasewood undergrowth.

4.00 Enter scattering scrub cedar timber, bears SE. and NW.

12.00 Top of mesa, bears NE. and SW.; continue over rolling mesa.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	S 28	S 27
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1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

42.00 Begin precipitous asc. over rim rock, 50 ft. high, bears E. and W.

48.00 Top of asc., bears E. and W.; continue over nearly level land.

59.00 Start abrupt desc., bears NE. and SW.

68.00 Dry draw, 30 lks. wide, drains SW.; asc. abruptly.

75.00 Top of abrupt asc., bears NE. and SW.; desc.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 21, 22, 27 and 28,

Subdivision of T. 38 S., R. 23 E.

chains. with brass cap mkd.

T 38 S R 23 E

S 21	S 22
S 28	S 27

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land, broken

Soil, gravel and clay; 4th rate.

Timber scattering scrub cedar. Undergrowth, greasewood.

Thence I run

N. $89^{\circ} 56'$ E., on random line bet. secs. 22 and 27.

0.00 Set temp. $\frac{1}{4}$ sec. cor.

30.15 Intersect the N. and S. line, 5 lks. S. of the cor. of
secs. 22, 23, 26 and 27,

Thence S. $89^{\circ} 54'$ W., on true line bet. secs. 22 and 27.

Desc. over rolling mesa, covered with scattering scrub
cedar timber.

27.60 Dry draw, 50 lks. wide, drains S.; asc.

34.00 Top of asc., bears NE. and SW.; desc. gradually.

40.07 $\frac{1}{2}$ Set an iron post, 3 ft. long; 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap, mkd.

$\frac{1}{4}$
S 22

S 27

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

64.00 Head of draw, 5 chs. wide, drains SW.

69.00 Edge of mesa, bears NE. and SW.; desc. abruptly over broken
NW. slope;

80.15 The cor. of secs. 21, 22, 27 and 28.

Land rolling and broken.

Soil, sandy loam and clay; 1st and 4th rates.

Timber, scattering scrub cedar.

June 20: At 12h Olm, p. m., 1. m. t., I set off $23^{\circ} 27'$

$30''$ N. on the decl. arc, and at the cor. of secs. 21,

(24)
Subdivision of T. 38 S., R. 23 E.

Chains.

22, 27 and 28, observe the sun on the meridian, the resulting lat. is $37^{\circ} 29' N.$

Thence I run

N. $0^{\circ} 02'$ W., bet. secs. 21 and 22.

Desc. over broken NW. slope of mesa, covered with scattering scrub cedar timber.

12.00 Bottom of slope, bears NE. and SW.; continue over nearly level bottom land; leave scrub cedar timber.

21.00 Dry draw, 1 ch. wide; drains SW.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S 21 | S 22

1912

Dig pits, 18x18x12 ins., N. and S., of post, 3 ft. dist. and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

46.00 Begin abrupt asc., over broken SE. slope of mesa, bears NE. and SW.

50.00 Enter scattering scrub cedar timber, bears NE. and SW.

60.00 Rim rock, 30 ft. high, bears NE. and SW.

72.00 Top of asc., edge of mesa, bears NE. and SW.; continue over gently rolling mesa.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the corl of secs. 15, 18, 21 and 22, with brass cap mkd.

T 38 S R 23 E

S 16 | S 15

S 21 | S 22

1912

Raise a mound of stone, 2 ft base; $1\frac{1}{2}$ ft. high, W. of cor. Land broken.

Soil, stony and gravel; 4th rate.

Timber, scrub cedar:

Thence I run

N. $89^{\circ} 54'$ E., on random line bet. secs. 15 and 22.

Subdivision of T. 38 S., R. 23 E.

Chains.	
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.04	Intersect the N. and S. line at the cor. of secs. 14, 15, 22 and 23. Thence, S. $89^{\circ} 54'$ W., on true line bet. secs. 15 and 22. Desc. over rolling open mesa, covered with sage brush, undergrowth.
5.00	Edge of mesa, bears NE. and SW.; desc. over broken W. slope.
16.00	Bottom of desc., bears NE. and SW.; desc. gradually.
24.00	Dry draw, 30 lks. wide, drains SW.; asc gradually.
40.02	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
	<u>S 15</u>
	<u>S 22</u>
	1912
	Dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
48.00	Start abrupt asc., over broken E. slope of ridge, bears N. and S.
50.00	Enter scattering scrub cedar timber, bears N. and S.
62.00	Top of ridge, bears N. and S.; desc.
70.00	Dry draw, 15 lks. wide, drains SE.; asc.
80.04	The cor. of secs. 15, 16, 21 and 22. Land broken. Soil, sandy and gravel; 4th rate. Timber, scattering scrub cedar. Undergrowth, sagebrush.
	June 20, 1912

June 21: At 8h 31m, a. m., l. m. t., I set off $37^{\circ} 30'$
 $30''$ N. on the lat. arc, $23^{\circ} 28'$ N. on the decl. arc,
and at the cor. of secs. 15, 16, 21 and 22, determine
the meridian with the solar.

Thence I run

N. $0^{\circ} 02'$ W., bet. secs. 15 and 16.

Subdivision of T. 38 S., R. 23 E.

Chains.

- Asc. over rolling land, covered with scrub cedar timber.
 4.00 Start asc. over stony S. slope of mesa.
 16.00 Top of mesa; 50 ft. above cor., bears E. and W.
 24.00 Start desc. over SW. slope of mesa, bears NW. and SE.
 39.00 Dry draw in canon, drains S. 30° E.; asc. over broken
 NW. slope of canon.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
 the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S 16 | S 15 ✓

1912

- Raise a mpund of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 44.00 Top of mesa, bears NW. and SE., continue over gently
 rolling land.
 64.00 Leave cedar timber, bears NE. and SW., enter open sage
 brushy mesa.
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in
 the ground for the cor. of secs. 9, 10, 15 and 16, with
 brass cap mkd.

T 38 S R 23 E

S 9 | S 10 ✓
---+---
S 16 | S 15

1912

Dig pits, 18x18x12 ins. in each sec., $5\frac{1}{2}$ ft. dist.; and
 raise a mound of earth, 4 ft. base, 2 ft. high, W. of
 cor.

Land, rolling and broken.

Soil, sandy loam; 1st rate.

Timber scrub cedar. Undergrowth, sagebrush, 16.00 chs.

Thence I run

N. $69^{\circ} 54'$ E., on random line bet. secs. 10 and 15.

40.00 Set temp. of sec. cor.

79.94 Intersect the N. and S. line at the cor. of secs. 10, 11,
 14 and 14.

Thence, S. $89^{\circ} 54'$ W., on true line bet. secs. 10 and 15.

Subdivision of T. 38 S., R. 23 E.

Chains.

- Asc. over broken land covered with scattering scrub cedar timber.
- 8.00 Top of ridge, bears N. and S.; desc. over E. slope of canon.
- 20.00 Bottom of canon, draining south.; asc. over rough broken W. slope.
- 38.00 Edge of mesa, bears N. and S.; continue over gently rolling land.
- 39.97 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S 10

S 15

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

68.00 Leave scattering scrub cedar timber, bears NE. and SW.; enter open sage brush mesa.

79.94 The cor. of secs. 9, 10, 15 and 16.

Land rolling and broken.

Soil, loam and gravel; 1st and 3rd rates.

Timber, scattering scrub cedar. Undergrowth, sagebrush, on 11.94 chs.

June 21: At 12h 0lm, p. m., 1. m. t., I set off 23°

$27' 30''$ N. on the decl. arc, and at the cor. of secs. 9, 10, 15 and 16, observe the sun on the meridian, the resulting lat. is $37^{\circ} 31' N.$

Thence I run

N. $0^{\circ} 02' W.$, bet. secs. 9 and 10.

Asc., over rolling mesa, covered with sage brush under-growth.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S 9. S 10

1912

Dig pits, $18 \times 18 \times 12$ ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth $2\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Subdivision of T. 38 S., R. 23 E.

Chains.

- The only tree within limits is
A cedar, 24 ins. in diam., bears S. 21° E.,
248 lks. dist.; mkd $\frac{1}{4}$ S10 BT.
80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in
the ground for the cor. of secs. 3, 4, 9 and 10, with
brass cap mkd.

S 4 | S 3 ✓

S 9 | S 10.

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Land, rolling.

Soil, sandy loam; 1st rate.

No timber. Undergrowth, sagebrush.

June 21, 1912

June 22: At 9h 32m, a. m., l. m. t., I set off $37^{\circ} 32'$
N. on the lat. arc; $23^{\circ} 23' 30''$ N. on the decl. arc,
and at the cor. of secs. 3, 4, 9 and 10, determine the
meridian with the solar.

Thence I run

N. $89^{\circ} 54'$ E., on random line bet. secs. 3 and 10.

40.00 Set temp $\frac{1}{4}$ sec. cor.

80.10 Intersect the N. and S. line 10 lks. S. of the cor. of
secs. 3, 3, 10 and 11.

Thence, S. $89^{\circ} 50'$ W., on true line bet. secs. 3 and 10.

Desc. over broken S. slope of mesa.

20.00 Dry draw, 30 lks. wide, drains S.; asc. gradually over
gently rolling land covered with greasewood undergrowth.

32.00 Start abrupt asc. over broken E. slope of mesa, covered
with scattering scrub cedar timber.

40.05 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor. with brass cap mkd.

 $\frac{1}{4}$

S 3 and S 10

1912

(29)

Subdivision of T. 38 S., R. 23 E.

Chains.	Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
45.00	E. edge of mesa, top of asc., bears N. and S.; continue over gently rolling sage brush mesa.
30.10	The cor. of secs. 3, 4, 9 and 10. Land rolling and broken. Soil, sandy loam on mesa, gravel in bottom; 1st and 4th rates. Undergrowth, sage and greasewood. Timber scattering scrub cedar.

June 26: At 12h 02m., p. m., l. m. t., I set off $23^{\circ} 22'$ N. on the decl. arc, and at the cor. of secs. 3, 4, 9 and 10, observe the sun on the meridian, the resulting lat. is $37^{\circ} 32'$ N.

Thence I run
N. $0^{\circ} 02'$ W., on random line bet. secs. 3 and 4.

40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.55	Intersect the N.bdy; Tp. 29 lks. W. of the cor. of secs. 3, 4, 33 and 34, heretofore described.
	Thence, S. $0^{\circ} 10'$ W., on true line bet. secs. 3 and 4. Desc. over rolling open sage brush mesa.
39.55	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	
S 4	S 3
1912	

Dig pits, 18x18x12 ins., N. and S., of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

79.55 The cor. of secs. 3, 4, 9 and 10.

Land, gently rolling.

Soil, sandy loam; 1st rate.

No timber. Undergrowth, sagebrush.

June 26, 1912

June 22: At 9h 32m., a. m., l. m. t., I set off $37^{\circ} 28'$ N. on the lat. arc, $23^{\circ} 28'$ N. on the decl. arc; and at

Subdivision of T. 38 S., R. 23 E.

Chains.

the cor. of secs. 4, 5, 32 and 33, on the Sbdy of the
 Tps., heretofore described, determine the meridian with
 the solar. Thence I run
 N. $0^{\circ} 03'$ W.; bet. secs. 32 and 33.

Over rolling open land covered with sage brush and greasewood undergrowth.

- 2.00 Bluff-Dolores Road, bears NE. and SW.
 24.00 Start asc. over SW. slope of ridge, bears NW. and SE.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. i
 the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S 32	S 33
------	------

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of

- 42.00 Top of ridge, bears E. and W. desc.
 60.00 Dry draw (Horse Creek) 1 ch. wide; 5 lks. deep, drains
 SW.; asc.
 76.00 Start abrupt asc. over broken E. slope of mesa.
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins.
 the ground for the cor. of secs. 28, 29, 32 and 33,
 with brass cap mkd.

T 38 S R 23 E	
S 29	S 28
S 32	S 33

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of

Soil sandy and stony; 3rd rate.

Land, rolling and broken.

No timber. Undergrowth, sagebrush and greasewood.

June 22: Cloudy at noon.
 Thence I run

S. $89^{\circ} 56'$ E., on random line bet. secs. 28 and 33.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.98 Intersect the N. and S. line, 28 lks. S. of the cor. of
 secs. 27, 28, 33 and 34.
 Thence, S. $89^{\circ} 52'$ W., on true line bet. secs. 28 and 33
 Desc. over broken land, covered with sage brush and
 greasewood undergrowth.

Subdivision of T. 38 S., R. 23 E.

Chains.

- 16.00 Dry draw, 10 lks. wide, drains S.; asc. slightly.
 36.00 Top of slight asc., bears N. and S.; desc. gradually.
 39.99 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
 thr ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$$\begin{array}{r} \frac{1}{4} \\ \text{S } 28 \\ \hline \text{S } 33 \\ 1912 \end{array}$$

- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
 42.00 Dry draw, 50 lks. wide, drains SW.; asc.
 50.00 Top of spur of ridge, projects S.; desc. over broken W.
 slope.
 53.00 Rim rock, 30 ft. high, bears NW. and SE.
 68.00 Bottom of desc.; bears NW. and SE.; dry draw, 1 ch. wide
 drains S.; asc. over broken W. slope.
 79.98 The cor. of secs. 28, 29, 32 and 33.

Land, rolling.

Soil, sandy in the bottom and stony and clay on the slopes;
 3rd and 4th rates. No timber. Undergrowth, sagebrush
 and greasewood.

June 22, 1912

 June 25: At 9h 02m, a. m., l. m. t., I set off $37^{\circ} 28'$
 $30''$ N. on the lat. arc, $23^{\circ} 24' 30''$ N. on the decl.
 arc, and at the cor. of secs. 28, 29, 32 and 33, deter-
 mine the meridian with the solar.

Thence I run

N. $0^{\circ} 03'$ W., bet. secs. 28 and 29.

Asc. over rocky E. slope of mesa, covered with shad coal.

- 15.00 A spring of clear cold water 5 chs. W. of line.
 25.00 Dry draw, 20 lks. wide, drains SE.; asc. over broken
 stony W. slope of mesa.
 34.00 Enter scattering scrub cedar timber, bears NW. and SE.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
 the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

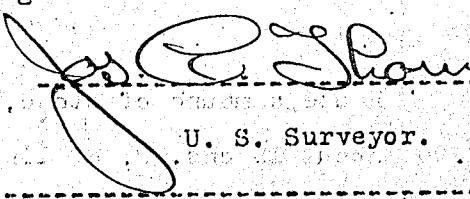
$$\begin{array}{r|l} \frac{1}{4} & \\ \text{S } 29 & \text{S } 28 \\ \hline & \\ & 1912 \end{array}$$

- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft high, W. of cor.
 42.00 About 15 chs. W. of line and across canon; cliff ruins.
 76.00 Dry draw, 50 lks. wide, drains W.

Subdivision of T. 38 S., R. 23 E.

Chains.	
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. i the ground for the cor. of secs. 20, 21, 28 and 29, with brass cap mkd.
	T 38 S R 23 E ✓ S 20 | S 21 ✓ S 29 | S 28 1912
	Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of Land, broken.
	Soil, loam and adobe, covered with rock; 3rd rate.
	Timber, scattering scrub cedar. Undergrowth, shadscale.
	Thence I run
	N. $89^{\circ} 52'$ E. on random line bet. secs. 21 and 28.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.96	Intersect the N. and S. line 5 lks. N. of the cor. of s 21, 22, 27 and 28. Thence, S. $89^{\circ} 54'$ W., on true line bet. secs. 21 and 28.
	Desc. gradually over nearly level bottom land, covered with sage brush and greasewood undergrowth.
37.00	Dry draw, 1 ch. wide, drains SW.; asc. gradually.
39.98	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. i the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
	$\frac{1}{4}$ S 21 ✓ S 28 1912
	Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of
50.00	Start abrupt asc. over broken E. slope of mesa, bears N and SW.; enter scattering scrub cedar timber.
59.00	Top of mesa, bears NE. and SW.; continue over rolling mesa covered with scattering scrub cedar timber.
79.96	The cor. of secs. 20, 21, 28 and 29.
Land.	Land, gently rolling and broken.
	Soil, sandy in the bottom, loam on mesa, 1st and 2nd ra
	Timber, scattering scrub cedar.
	Undergrowth, sagebrush and greasewood.

June 25, 1912


U. S. Surveyor.

Subdivision of T.38 S.R.23 E.

Chains.

June 25: At 2 p.m.l.m.t. I set off $37^{\circ}29'30''$ on the lat. arc; $23^{\circ}24'30''$ N. on the dec. arc and determine a meridian with the solar, the cor. of secs. 20, 21, 28 and 29. Thence I run, N. $0^{\circ}03'$ W. bet. secs. 20 and 21. over rolling mesa, good growth of sage brush. Scat. cedars.

- 5.00 Wash, 10 lks. wide. dry, cse. W.
 15.00 Leave cedars, enter open sage brush.
 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor. with brass cap marked

$\frac{1}{4}$ S 20	S 21.
--------------------	-------

I9I2

- dig pits 18 X 18 X 12 ins. N. & S. of the post, 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 65.00 Enter scat. cedar & pinon. brs. E & W.
 80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for the corner of secs. 16, 17, 20 and 21. with brass cap, marked

T. 38 S	R 23 E
S 17	S 16
S 20	S 21

I9I2

from which, a scrub cedar, 6 ins. in dia., brs. N. 48° E 110 lks. marked, T 38 S R 23 E S 16 B T

A cedar, 5 ins. in dia., brs. S. $29^{\circ}45'$ E. 220 lks. dist. marked, T 38 S R 23 E S 21 B T

A cedar, 5 ins. in dia., brs. S. 45° W. 128 lks. dist. marked, T 38 S R 23 E S 20 B T

A cedar, 6 ins. in dia. brs. N. $35^{\circ}15'$ W. 63 lks. dist. marked, T 38 S R 23 E S 17 B T

Land rolling.

Soil, sandy bench loam. Ist, rate if irrigated.

Timber, scat. scrub cedar and pinon.

Grazing fair. Undergrowth, sagebrush.

Subdivision of T.38 S.R.23 E.

Chains.	Thence I run
	N.89°54' E. on random line bet. secs. 16 and 21.
40.00	Set temp. sec.corner.
80.13	Intersect the N & S line, 11 lks. S of the cor. of secs. 15, 16, 21 and 22. Thence, S.89°49' W. on true line bet. secs. 16 and 21. Over broken mesa, through dense cedar and pinon. Grad. asc.
15.00	Leave cedar & pinon.
40.06	Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the ground for the sec.cor. with brass cap marked

S → 16
S 21
1912

	from which, a cedar, 5 in. in dia., brs. N.70°30' E. 90 lks. dist. marked, S 16 B T
	A cedar, 6 ins., in dia., brs, S 42°30' E. 88 lks. dist. marked, S 21 B T
50.00	Enter dense cedar & pinon. N. & S.
80.13	The corner of secs. 16, 17, 20 and 21. Land broken. Soil, dark sandy loam and stony poor rate. 2nd, to 1st. rate. Timber, cedar and pinon. Undergrowth, short sage brush. Grazing fair to poor.

June 25th, 1912

Daniel B. Miller.
U.S. Surveyor.

	June 27: At 8h 03m, a. m. l. m. t., I set off 37° 30' N. on the lat. arc, 23° 21' N. on the decl. arc, and at the cor. of secs. 16, 17, 20 and 21, determine the meridian with the solar.
	Thence I run
	N. 0° 03' W., bet. secs. 16 and 17.
	Over rolling mesa, covered with scattering scrub cedar timber.
26.00	Rim of cañon, 100 ft. deep, bears NE. and SW.

Subdivision of T. 38 S., R. 23 E.

Chains.

34.50 N. rim of canon; bears NE. and SW.; continue over rolling mesa.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	S 17	S 16
	1912	

From which

A cedar, 24 ins. in diam., bears N. 57° E.,
85 lks. dist., mkd. $\frac{1}{4}$ S 16 BT.

A cedar, 12 ins. in diam., bears S. 63° W.,
47 lks. dist., mkd. $\frac{1}{4}$ S 17 BT.

44.00 Start abrupt desc., over broken NW. slope of mesa, over a series of small ridges and ravines, bears NE. and SW.

70.00 Foot of desc.; bears NE. and SW., 100 ft. below top.

74.50 Dry canon draw, 150 lks. wide, drains SW.

76.00 Start abrupt asc. over broken, rocky SE. slope of mesa, bears NE. and SW.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 8, 9, 16 and 17, with brass cap mkd.

T 38 S R 23 E

S 8	S 9	✓
S 17	S 16	

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land rolling and broken.

Soil, sandy loam on mesu, adobe and covered with rock on slopes of canon; 1st and 4th rates.

Timber, scattering scrub cedar.

Thence I run

N. $89^\circ 49'$ E., on random line bet. secs. 9 and 16.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.02 Intersect the N. and S. line at the cor. of secs. 9, 10, 15 and 16.

Subdivision of T. 38 S., R. 23 E.

Chains.	
	June 27: At 12h 03m., p. m., l. m. t., I set off $23^{\circ} 20'$ N. on the decl. arc, and at the cor. of secs. 9, 10, and 16, observe the sun on the meridian, the resulting lat. is $37^{\circ} 31'$ N. Thence, S. $89^{\circ} 49'$ W., on true line bet. secs. 9 and 16 Desc. over broken W. slope of mesa, bears N. and S.
10.00	Dry draw, 20 lks. wide, drains S.; asc. abruptly over broken E. slope of mesa.
40.01	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap, mkd.
	$\frac{1}{4}$ <u>S 9</u>
	S 16
	1912
60.00	Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of Top of mesa, 100 ft. above draw, bears N. and S., cont. over level mesa, covered with scattering scrub cedar timber.
73.00	Start desc. over E. slope of mesa, bears N. and S.
74.00	Dry draw, 30 lks. wide, drains S.; asc.
80.02	The cor. of secs. 8, 9, 16 and 17. Land rolling and broken. Soil, sandy loam and gravel; 2nd and 3rd rates. Timber, scrub cedar.

	Thence I run N. $0^{\circ} 03'$ W., bet. secs. 8 and 9. Asc. over broken slope, covered with scattering scrub cedar timber.
8.00	Top of asc., bears E. and W.; desc.
28.00	Dry draw, drains S. 20° E., S. 20° W.; asc.
36.00	Top of spur of mesa, projects W.; desc.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
	$\frac{1}{4}$ * <u>S 8</u> | <u>S 9</u> 1912

Subdivision of T. 38 S., R. 23 E.

Chains.

- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 48.00 Dry draw, 1 ch. wide, drains SW.; asc. along bottom of same.
 57.00 Start abrupt asc., over broken SE. slope.
 60.00 Top of abrupt asc., asc. gradually.
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in
 the ground for the cor. of secs. 4, 5, 8 and 9, with
 brass cap mkd.

T 38 S R 23 E.

S 5	S 4
S 8	S 9

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 Land, broken.

Soil loam; 3rd rate.

Timber, scattering scrub cedar.

Thence I run

N. $89^{\circ} 49'$ E., on random line bet. secs. 4 and 9.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.03 Intersect the N. and S. line, 16 lks. S. of the cor. of
 secs. 3, 4, 9 and 10.
 Thence, S. $89^{\circ} 42'$ W., on true line bet. secs. 4 and 9.
 Desc. over rolling mesa, covered with sage brush undergrowth.
 20.00 Dry draw, 40 lks. wide, drains S.; asc. gradually.
 39.00 Top of asc., bears NN. and SW.; desc. gradually.
 40.01 $\frac{1}{2}$ Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
 the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

 $\frac{1}{4}$

S 4

S 9

1912

- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
 44.00 Dry draw, 20 lks. wide, drains SW.; asc.
 68.00 Edge of mesa, bears N. and S.; desc. over broken slope.
 74.00 Bottom of desc. of broken slope, bears N. and S. Dry
 draw, 30 lks. wide, drains S.; asc.

Subdivision of T. 38 S., R. 23 E.

Chains.	
80.03	The cor. of secs. 4, 5, 8 and 9. Land, rolling. Soil, sandy loam; 1st rate. Scattering scrub cedar timber. Undergrowth, sagebrush.
40.00	Thence I run N. $0^{\circ} 03'$ W. on random line bet. secs. 4 and 5.
79.62	Set temp. $\frac{1}{4}$ sec. cor. Intersect the N.bdy, Tp. 34 lks. W. of the cor. of secs. 4, 5, 32 and 33, heretofore described. Thence, S. $0^{\circ} 12'$ W. on true line bet. secs. 4 and 5. Desc. gradually over nearly level bottom land covered with sage brush undergrowth.
15.60	Dry draw, 50 lks. wide, drains SW.; asc. gradually.
23.60	Enter dense scrub cedar timber, bears NE. and SW.
39.62	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. i the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
	$\frac{1}{4}$ S-5 | S 4
	1912
41.60	Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of Start abrupt asc. over broken N. slope of mesa, nears N and SW.
71.60	Top of mesa, 150 ft. above draw, bears NE. and SW.
79.62	The cor. of secs. 4, 5, 8 and 9. Land rolling and broken. Soil, gravel and adobe; 3rd and 4th rates. Timber, scrub cedar. Undergrowth, sagebrush.

June 27, 1912.

June 24: At 9h 03m, a. m., l. m. t., I set off $37^{\circ} 28'$
N. on the lat. arc, $23^{\circ} 26'$ N. on the decl. arc, and a
the cor. of secs. 8, 6, 31 and 32, on S.bdy, of the Tp.
heretofore idescribed to determine the meridian with the
solar.
Thence I run
N. $0^{\circ} 03'$ W., bet. secs. 31 and 32.

Subdivision of T. 38 S., R. 23 E.

Chains.

Asc. abruptly over broken rocky SE. slope of mesa, covered with scattering scrub cedar timber.

7.00 Top of mesa, bears NE. and SW.; continue along level top.

35.00 Desc. abruptly over broken slope of mesa, bears NW. & SE.

39.50 Head of draw, drains SE.; asc. over broken slope of mesa.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S 31	S 32
------	------

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

46.50 Top of mesa, bears E. and W., continue over level mesa.

56.00 Leave scattering scrub cedar timber, bears E. and W.

60.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 29, 30, 31 and 32, with brass cap mkd.

T 38 S R 23 E
S 30 | S 29

S 31	S 32
------	------

1912

Dig pits, $18 \times 18 \times 12$ ins. in each sec., $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land broken and rolling.

Soil, sandy loam; on mesa; 1st rate.

Timber, scattering scrub cedar.

Thence I run

S. $89^{\circ} 52'$ E., on random line bet. secs. 29 and 32.

40.00 Set temp. $\frac{1}{4}$ cor.

60.00 Intersect the N. and S. line 25 lks. S. of the cor. of secs. 28, 29, 32 and 33.

Thence, S. $89^{\circ} 51'$ W., on true line bet. secs. 29 and 32.

Asc. abruptly over broken E. slope of mesa.

14.00 Edge of mesa, bears N. and S., continue over level land.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S 29
S 32

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Subdivision of T. 38 S., R. 23 E.

(40)

Chains.	
74.50	Head of canon, 6 chs. wide, drains S. into C. G. M.
80.00	The cor. of secs. 29, 30, 31 and 32. Land rolling and broken. Soil, sandy loam. 1st rate. No timber.
	June 24, Cloudy at noon.
	Thence I run N. $89^{\circ} 58'$ W., on random line bet. secs. 30 and 31.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
78.75	Intersect the Colo. G. M., 9 lks. S., of the cor. of secs. 25, 30, 31 and 36, heretofore described.
	Thence N. $89^{\circ} 54'$ E., on true line bet. secs. 30 and 31.
	Asc. abruptly over broken rocky E. slope of Recapture C.
34.40	Top of abrupt asc., edge of mesa, 250 ft. above bottom canon, bears N. and S., continue over level open mesa
38.75	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. i the ground for the $\frac{1}{4}$ sec cor., with brass cap mkd.
	$\frac{1}{4}$
	S 30
	S 31
	1912
	Dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist. and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, of cor.
78.75	The cor. of secs. 29, 30, 31 and 32. Land, rolling and broken. Soil, sandy loam on mesa; adobe and stony on slope; 1st and 4th rates. No timber.
	June 24, 1912.
	<i>Les C. Rose</i>
	U.S. Surveyor

Subdivision of T.38 S.R.23 E.

Chains.

June 25: At 7^h30^m a.m. I set off 37°28'30" on the lat. arc, 23°25'30" N. on the dec. arc, and determine a meridian with the solar, at the cor. of secs. 29, 30, 31 and 32.

Thence I run,

N.0°03'W. on true line bet. secs. 29 and 30.

Over rolling mesa. Sage brush and scat. cedar and pinon.

40.00

Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor. with brass cap marked

$\frac{1}{4}$	S 30		S 29
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I9I2

Dig pits 18 X 18 X 12 ins. N. & S. of the post, 3 ft. dist. & raise a mound of earth, $3\frac{1}{2}$ ft. base. $1\frac{1}{2}$ ft. high N. of the cor.

80.00

Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for the cor. of secs. 19, 20, 29 and 30. with brass cap marked

T 38 S	R 23 E
S 19	S 20
S 30	S 29

I9I2

from which, a scrub cedar, 6 ins. in dia., brs. N. 57°E 78 lks. marked, T 38 S R 23 E S 20 B T

A cedar, 5 ins. in dia., brs. S. 51°E 15' 72 lks. dist.

marked, T 38 S R 23 E S 29 B T

A cedar, 6 ins. in dia., brs. N. 64°W. 61 lks. dist.

marked, T 38 S R 23 E S 19 B T

No tree in sec. 30 suitable for marking.

Dig pits, 18 X 18 X 12 ins. in each sec. $5\frac{1}{2}$ ft. dist. and raise a mound of earth, 4 ft. bse, 2 ft. high N. of the cor.

Land gently rolling.

Soil, dark bench loam. Ist. rate if irrigated.

Timber, scat. cedar & pinon.

Undergrowth, short sage brush.

Grazing fair.

Subdivision of T.38 S.R.23 E.

Chains.	June 25, At apparent noon, I set off $23^{\circ}24'30''$ N.on the de arc and observe the sun on the meridian; at the corner c secs.19,20,29 and 30. The lat.arc reads $37^{\circ}29'30''$, which shows the instrumental lat.to be approximately correct. Thence I run
	. N. $89^{\circ}51'$ E. on random line bet.secs.20 and 29.
40.00	Set temp $\frac{1}{4}$ sec.cor.
79.98	Intersect the N.&S.line, $\frac{1}{4}$ lks.N.of the cor.of secs.20 21,28 and 29. Thence S. $89^{\circ}53'$ W.on true line bet.secs.20 and 29. Over rolling broken mesa. Short sage brush, and scat.ced and pinon.
3.50	Canon wash, 20 lks.wide,dry,cse.S.asc.
16.00	Leave cedar & pinon.brs.NE & SW.
39.99	Set an iron post 3 ft.long, 1 in.in dia., 24 ins.in the ground, for the $\frac{1}{4}$ sec.cor.with brass cap marked S 20 S 29 1912 dig pits. 18 X 18 X 12 ins.E & W.of the post 3 ft.dist raise a mound of earth $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft.high N.of the The corner of secs.19,20,29 and 30. Land,rolling and slightly broken. Soil,dark bench loam. 1st,& 2nd,rate if irrigated. Timber scat.cedar & pinon 16 chs. Undergrowth short sage brush. Grazing,fair.
79.98	

June 25, 1912.

Subdivision of T.38.S.R.23 E.

11

- Chains. June 25: At 10^h 30^m. a.m.l.m.t. I set off 37°29'30" on the lat.arc, and 23°25'N.on the dec.arc and determine a mer. with the solar at the cor.of secs.I9,20,29 and 30.
 Thence I run S.89°54'W.on random line bet.secs.I9 and 30.
- 40.00 Set temp. $\frac{1}{4}$ sec.cor.
- 78.00 Intersect the W.bdy.of the Tp.1D lks.N.of the cor.of secs.I9,24,25 and 30, heretofore described.
 Thence N.89°49'E.On true line bet.secs.I9 and 30.
 Over canon bottom.
- 7.70 P.M. Shumways Irrigation Ditch,10 lks.wide,cse.S.
- 8.00 Right bank of Recapture Creek,20 ft.high.cse.S.
- 9.50 Edge of water,clear,6 in.deep cse.S. 10 lks.wide.
- 10.25 Left bank of creek.10 ft.high.cse.S.
- 16.50 Old Monticello Bluff stage road now abandoned,brs.N&S.
- 22.50 Base of E.side of canon,N&S.begin steep ascent to high ridge,over washed slope badly cut by washes.
- 32.25 Edge of rim rock at top of ridge,250 ft.above base.
 Over bed rock & thin top soil.
- 35.25 Desc.over rim rock,into canon.NE&SW.
- 38.00 Set an iron post 3 ft. long,1 in.in dia.,24 ins.in stone and earth,for the $\frac{1}{4}$ sec.cor.with brass cap,marked,
- S 19
S 30
1912
- raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high N.of the cor.
- 48.00 Canon wash,20 lks.wide,dry,250 ft.below top of ridge, course S.W. asc.200 ft.on E.side of canon.
- 55.00 Edge of mesa,NE&SW.over rim rock.thence grad.asc.rolling mesa,scat.cedar & pinon.
- 68.00 Leave scat.cedar,over short sage brush.
- 78.00 The cor.of secs.I9,20,29 and 30.
 Land broken and rolling.
 Soil,poor 3rd.& 4th,rate.
 Scat.cedar & pinon scrubby gth.Little vegetation,
 Scant grazing.
 Short sagebrush undergrowth.

June 25th,1912.

Subdivision of T.38 S.R.23 E.

Chains.	June 26: At 9 a.m. I set off $37^{\circ}29'28''$ on the lat. arc, and $23^{\circ}23'N.$ on the dec. arc, and determine a meridian with the solar at the corner of secs. I9, 20, 29 and 30. Thence I run, N. $0^{\circ}03'W.$ on line bet. secs. I9 and 20. Over broken surface, short sage brush.
22.00	Head of gulch, dry, cse. SW.
30.00	Mesa point, projects SW. desc. about 100 ft. abruptly.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in earth and stone, on stone bed rock, for the $\frac{1}{4}$ sec. cor. with brass cap marked
	$\frac{1}{4}$ S I9 | S 20 I9I2
	raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.
41.50	Canon wash, dry, 25 lks. wide, cse. SW. Asc. steep slope on W. side of canon. 175 ft.
80.00	Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the earth, for the corner of secs. I7, I8, I9 and 20. with brass cap marked
	T 38 S R 23 E S I8 | S I7 S I9 | S 20 I9I2
	raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of the cor.
	Trees in distance too scrubby for marking.
	Land, broken.
	Soil, poor stony and 4th, rate.
	Timber, scat cedar and pinon. scrubby growth.
	Undergrowth, short sage brush,
	Scant grazing.
	June 26, 1912.
	<i>Daniel B. Miller</i> U.S. Surveyor.

Subdivision of T. 38 S., R. 23 E.

Chains.

June 28: At 8h 33m, a. m. l. m. t., I set off $37^{\circ} 30' 30''$ N. on the lat. arc, $23^{\circ} 18'$ N. on the decl. arc, and at the cor. of secs. 17, 18, 19 and 20, determine the meridian with the solar.

Thence I run

N. $89^{\circ} 53'$ E., on random line bet. secs. 17 and 20.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.38 Intersect the N. and S. line, 5 lks. S. of the cor. of secs. 16, 17, 20 and 21.

Thence, S. $89^{\circ} 51'$ W., on true line bet. secs. 17 and 20.

Desc. gradually over open sage brush mesa.

2040 Edge of mesa, start abrupt desc. over broken W. slope of mesa, covered with scattering scrub cedar timber, bears NE. and SW.

38.40 Bottom of abrupt desc. Dry draw, 40 lks. wide, drains SW.; asc. over broken W. slope of canon.

40.19 Set an iron post, 3 ft. long 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 17

S 20

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

44.40 About 7 cns. N. of line a spring of clear cold water.

49.50 Top of abrupt asc., edge of mesa, continue over rolling mesa.

80.38 The cor. of secs. 17, 18, 19 and 20.

Land rolling and broken.

Soil, sandy loam on mesa, adobe and stone in canon; 1st and 4th rates.

Timber, scattering scrub cedar.

Undergrowth, sagebrush.

June 28, 1912

U. S. Surveyor.

Subdivision of T.38 S.R.23 E.

Chains.	June 26:I run, \$.89°49' W.on random line bet.secs.I8 and I9.
40.00	Set temp $\frac{1}{4}$ sec.cor.
78.10	Intersect the Colorado Guide Meridian, 25 lks.S.of. the cor.of secs.I3,I8,I9 and 24, heretofore described.
June 26	At this corner at 10h.30m.a.m.l.m.t. I set off $37^{\circ}30'30''$ on the lat.arc, and $23^{\circ}23'30''$ N.on the dec.arc and with the solar,determine a meridian.
	Thence East on true line bet.secs.I8 and I9.
	Over open rolling bench,
3.00	Canon wash,dry,50 lks.wide,cse,SW.
13.00	Begin steep asc.of W.slope of mesa.Over broken bad land. Old stage road bet.Bluff and Monticello,now abandoned, cbears.N & S.
23.00	Top of ascent,over sandstone rim rock,to W.edge of mesa. 250 ft.above the sec.cor.Ledges,bear NE and S. grad,asc.through scat.cedars.
38.10	Set an iron post 3 ft.long, 1 in.in dia.,24 ins.in ground, for the $\frac{1}{2}$ sec.cor.with brass cap marked
	S I8 S I9 1912
	dig pits I8 X I8 X I2 ins.E & W.of the post,3 ft.dist raise a mound of earth $3\frac{1}{2}$.ft.base, $1\frac{1}{2}$ ft.high N.of the cor.
	Thence over broken surface.Desc.
70.00	Canon wash,dry,cse.S.asc.
78.10	The cor.of secs.I7,I8,I9, and 20.
	Land,broken.
	Soil,rocky and poor bad land.
	Timber,scrub cedar and pinon.55.10 chs.
	Scant grazing,about 15.00 chs.
	June 26, 1912.
	<i>Daniel B. Miller,</i> U.S. Surveyor.

Subdivision of T. 38 S., R. 23 E.

June 28, 1912:

N. $0^{\circ} 03'$ W., bet. secs. 17 and 18.

Desc. over rolling mesa, covered with scattering scrub cedar timber.

Cross canon, near the head, 9 chs. wide, 50 ft deep, drains SW.

Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S 18	S 17
1912	

From which

A cedar, 8 ins. in diam., bears N. 77° E.,25 lks. dist., mkd. $\frac{1}{4}$ S 17 BT.A cedar 14 ins. in diam., bears S $^{\circ}$ 10° W.,114 lks. dist., mkd. $\frac{1}{4}$ S 18 BT.

Leave cedar timber, bears NW. and SE., enter open sage brush mesa.

Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 7, 8, 17 and 18, with brass cap mkd.

T 38 S R. 23 E.

S 7	S 8
S 18	S 17
1912	

Dig pits; $18 \times 18 \times 12$ ins., in each sec. $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, w. of cor.

Land, rolling.

Soil, sandy loam, 1st rate.

Timber, scattering scrub cedar. Undergrowth, sagebrush, on 30.00 chs.

June 28: At 12h 03m, p. m. 1. m. t.; I set off $23^{\circ} 17' 30''$ N. on the decl. arc, and at the cor. of secs. 7, 8, 17 and 18, observe the sun on the meridian, the resulting lat. is $37^{\circ} 31'$ N. (This would be mded. 38.81)

Thence I run

Chains.

- N. $89^{\circ} 51'$ E., on a random line bet. secs. 8 and 17.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.02 Intersect the N. and S. line, at the cor. of secs. 8, 9, 16 and 17.
Thence, S. $89^{\circ} 51'$ W., on true line bet. secs. 8 and 17.
Asc. over broken land covered with dense cedar timber.
- 2.00 Top of asc., bears N. and S.; desc.
- 11.00 Dry draw, 1 ch. wide, drains S.; asc.
- 19.00 Edge of mesa, bears N. and S., continue over level land.
- 36.00 Leave dense cedar timber, bears N. and SE. enter open sage brush mesa.
- 40.01 Set an iron post, 3 ft. long, $2\frac{1}{2}$ in. in diam., 24 ins. i
the ground for the $\frac{1}{4}$ sec. cor., with brass cap, mkd.

 $\frac{1}{4}$
S 8
S 17
- 1912
- Dig pits, 18x18x12 ins. E. and W. of post 3 ft. dist. and raise a mound of earth. $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. cor.
- 80.02 The cor. of secs. 7, 8, 17 and 18.
Land rolling and broken.
Soil, sandy loam; 1st rate.
Timber scrub cedar. Sagebrush undergrowth on 44.02 chs.
-
- Thence I run
West, on random line bet. secs. 7 and 18.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 77.88 Intersect the Colo. G. M., 25 lks. N. of the cor. of secs. 17, 18, 13 and 18, heretofore described.
- Thence I run
N. $89^{\circ} 49'$ E., on true line bet. secs. 7 and 18.
Desc. over broken E. slope of mesa, over a series of ridges and ravines.
- 18.90 Bottom of broken E. slope, bears N. and S.
- 20.00 Dry draw, 1 ch. wide, drains SE.
- 22.00 Dry draw, 1 ch. wide, drains SW.; asc.

Subdivision of T. 38 S., R. 23 E.

Chains.

- 37.88 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$$\frac{1}{4}$$

S 7

S 18

1912

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

- 39.00 Start abrupt asc. over broken E. slope of canon, covered with scattering scrub cedar timber, bears NE. and SW.

- 53.90 Top of asc., 200 ft. above bottom, bears NE. and SW., continue over level mesa land,

- 65.90 Leave scattering scrub cedar timber, bears NE. and SW., enter open sage brush mesa.

- 77.88 The cor. of secs. 7, 8, 17 and 18.

Land rolling and broken.

Soil, sandy and adobe in canon, sandy loam on mesa, 1st and 4th rates.

Timber, scrub cedar. Undergrowth, sagebrush.

June 28, 1912.

June 29: At .8h 33m, a. m., l. m. t., I set off $37^{\circ} 31'$ N. on the lat. arc, $23^{\circ} 15'$ N. on the decl. arc, and at the cor. of secs. 7, 8, 17 and 18, determine the meridian with the solar.

Thence I run:

N. $0^{\circ} 03'$ W., bet. secs. 7 and 8.

Over rolling mesa covered with sage brush undergrowth.

- 8.00 Enter dense scrub cedar timber; bears NE. and SW.

- 24.00 Cross head of canon, 4 chs. wide, drains SW.

- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$$\frac{1}{4}$$

S 7 | S 8

1912

From which

A cedar, 20 ins. in diam., bears S. 73° E.,72 lks. dist., mkd. $\frac{1}{4}$ S8 BT.

Subdivision of T. 38 S., R. 23 E.

Chains.

A cedar, 14 ins. in diam., bears S. 88° W.,
31 lks. dist.; mkd. $\frac{1}{4}$ S7 BT.

- 47.00 Start abrupt desc., over broken NW. slope of mesa, bears NE. and SW.
- 68.00 Leave dense scrub cedar timber, bears NE. and SW.
- 70.00 Bottom of abrupt desc. Dry draw, 60 lks. wide, drains SW. asc.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 5, 6, 7, and 8, with brass cap mkd.

T 38 S R 23 E

S 6	S 5
S 7	S 8

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Land rolling and broken.

Soil, sandy loam on mesa, adobe and stone in bottom; 1st and 4th rates.

Timber, scrub cedar. Undergrowth, sagebrush.

Thence I run

N. $89^{\circ} 51'$ E. on random line bet. secs. 5 and 8.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.

- 80.08 Intersect the N. and S. line, 9 lks. S. of the cor. of secs. 4, 5, 8 and 9.

Thence, S. $89^{\circ} 47'$ W., on true line bet. secs. 5 and 8.

Desc. over broken W. slope, covered with dense scrub cedar and pinon timber.

- 6.00 Dry draw, 20 lks. wide, drains S.; asc. over broken E. slope.

- 12.00 Top of asc., edge of mesa, bears NE. and SW., continue over nearly level land.

- 40.04 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S 5

S 8

1912

(34)

Subdivision of T. 38 S., R. 23 E.

Chains.

From which

A cedar, 12 ins. in diam., bears N. 15° E.;
18 lks. dist., mkd. $\frac{1}{4}$ S5 BT.

A cedar, 20 ins. in diam., bears S. 52° E., 41
41 lks. dist., mkd. $\frac{1}{4}$ S8 BT.

41.00 Edge of mesa, bears NE. and SW.; desc. abruptly over
broken NW. slope.

73.00 Leave dense scrub cedar and pinon timber, bears NE. and
SW.; enter open sage brush land.

77.00 Dry draw, 60 lks. wide, drains SW.; asc.

80.08 The cor. of secs. 5, 6, 7, and 8.

Land rolling and broken.

Soil; sandy loam; on mesa, adobe and stony on slopes; 1st
and 4th. rates.

Timber scrub cedar and pinon. Undergrowth, on 7:08 chs.
sagebrush.

June 29: At 12h 03m, p. m., l. m. t., I set off $23^{\circ} 14'$
N. on the decl. arc, and at the cor. of secs. 5, 6, 7
and 8, observe the sun on the meridian, the resulting lat.
is $37^{\circ} 32'$ N.

Thence I run
S. $89^{\circ} 49'$ W., on random line bet. secs. 6 and 7.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

77.45 Intersect the Colo. G. M., 21 lks. S. of the cor. of secs.
1, 6, 7 and 12, heretofore described.

Thence, N. $89^{\circ} 58'$ E., on true line bet. secs. 6 and 7.
Desc. gradually over rolling mesa, covered with dense
scrub cedar timber.

25.50 Leave dense scrub cedar timber, continue in scattering
scrub cedars.

2740 Edge of mesa, bears N. and S.; desc. abruptly over broken
stony E. slope.

37.45 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

Subdivision of T. 38 S., R. 23 E.

Chains.

- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of c
 55.00 Wash, drains S.
 65.40 Leave scattering scrub cedar timber, bears N. and S.,
 enter barren land broken with ridges and ravines.
 77.45 The cor. of secs. 5, 6, 7 and 8.
 Land rolling and broken.
 Soil, sandy loam on mesa, adobe and gravel on slopes;
 1st and 4th rates.
 Timber, scrub cedar.
-

Thence I run

N. $0^{\circ} 03'$ W., on random line bet. secs. 5 and 6.40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.65 Intersect the N.bdy.Tp. 35 lks. W. of the cor. of secs.

5, 6, 31 and 32, heretofore described.

Thence S. $0^{\circ} 12'$ W., on true line bet. secs. 5 and 6.Desc. gradually over rolling mesa, covered with dense
 scrub cedar and pinon timber.

7.00 Desc. over rim 70 ft. high, bears E. and W.

27.00 Bottom of canon, 200 ft. below top, drains W.; asc.

37.00 Top of rim, 70 ft. high, bears NE. and SW.; desc. gradual

39.65 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
 the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	S 6	S 5
---------------	-----	-----

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of c72.00 Leave scrub cedar timber, bears NE. and SW. enter barren
 land.

79.65 The cor. of secs. 5, 6, 7 and 8.

Land broken.

Soil, adobe and clay 4th rate.

Timber, scrub cedar and pinon.

June 29, 1912.

U. S. Surveyor.

GENERAL DESCRIPTION.

T.38 S.R.23 E.

This township is about one third mesa surface, which is usually covered with scrub cedar and pinon from scattered growth to dense. This timber is mostly fit only for fuel, but there may be found considerable quantity from which fence posts may be made.

The soil on the mesa surface is of a rich dark reddish color, and seems to be productive, if irrigated.

There is some good grazing on small areas where the open sage brush flats occur.

Most of the township is however, either within canon breaks, or on side slopes leading down from the mesas. This area is usually barren or nearly so and the soil being loose, is badly washed away, exposing sandstone boulders on the surface, and bed rock in many places.

The canons and gulches are from 50 ft. to 250 ft. below the mesas.

Recapture Creek which skirts the W.bdy, and enters the township in several places, and with a channel of about 40 ft. wide in average high water, and 2 ft. deep with a swift current, is the only running stream in the township.

This stream goes nearly or quite dry in late summer and fall.

There is a spring in Sec. 27 that furnishes a good supply of water for stock and a generally used camping place for stockmen and freighters, with a good corral near.

There are no settlers in this township. P.M. Shumway has a little fencing in sec. 24 T.38 S.R.22 E. near the W.bdy. of this Tp. has a small patch of ground in sec. 30 under cultivation.

Recapture Creek has a canon extending $\frac{1}{2}$ mile to the E. in the southern part of the Tp. and practically a box canon in the northern part.

Deep wide canons lead off from Recapture Canon, and in

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T.38 S.R.23 E.General Description.

consequence thereof the surface is much broken. The eastern part of this township is drained by canons leading into Alkali Wash, an arm of Montezuma Canon. The drops from the mesas into these canons are usually over sandstone ledges, perpendicular or nearly so, from a few feet high to 40 or 50 ft. There are no regularly traveled roads in T.38 S.R.23 E. The old Bluff-Monticello stage road formerly used, is now practically abandoned, except for pack trains, or driving stock across the country. Empty or light loaded wagons may use this road at this time however. No coal or other evidence of mineral in any considerable quantity was observed.

Daniel B. Miller
Jos. C. Shown

U.S. Surveyors

For oaths of U.S. Surveyors and certificates of assistants, see Book "W" of this group.

CERTIFICATE OF ASSISTANTS.

For certificate of assistants see book "V" T.39 S., R.26 E.

Meridian, in the State of

which are represented in the foregoing field notes as having been executed by him, and under his direction; and that said survey has been, in all respects, to the best of our knowledge and belief, well and faithfully executed.

subscribed and certified to before me on the dates of the final service as shown above.

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____.

For final oaths of U.S. Surveyors see book "V" T. 39 S., R. 26 E.

of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191_____. }



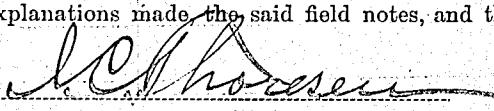
APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 2 _____, 1915

The foregoing field notes of the survey of the subdivisional lines of Township No. 38 South, Range No. 23 East of the Salt Lake Base and Meridian, Utah,

executed by Daniel B. Miller and Joseph C. Thoma
under his special instructions dated March 26, 1913, having been critically examined, and the necessary corrections and explanations made the said field notes, and the surveys they describe, are hereby approved.


U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

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BOOK A-412

Filed Jul 1 1913

H.E.W.

FIELD NOTES

OF THE SURVEY OF THE

EAST AND NORTH BOUNDARIES

O F

T. 37 S., R. 23 E.

A N D

RETRACEMENT OF THE

COLORADO GUIDE MERIDIAN

THROUGH

TOWNSHIP 37 SOUTH

Of the Salt Lake Base and Meridian,

the State of UTAH.

EXECUTED BY

Daniel B. Miller and Jos. C. Thoma

The capacity of U.S. Surveyors, under instructions dated March 26th, 1912,
 ed by the United States Surveyor General to govern surveys included in
 up No. 16, which were approved by the Commissioner of the General Land
 ce, April 2, 1912.

Survey commenced July 1st, 1912.

Survey completed July 24th, 1912.

BOOK A-412

INDEX DIAGRAM.

Township _____, Range _____

6	5	4	3	2	1
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30	29	28	27	26	25
31	32	33	34	35	36

East Bdy. of T. 37 S., R. 23 E.

Survey commenced July 1st, 1912, and executed with a Young & Sons light mountain transit, No. 8#87, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

I examine the adjustments of the transit, and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a. m. and p. m. hours, with a meridian determined by observation on Polaris, I proceed as follows:

At my camp near the centre of Sec. 9, T. 37 S., R. 23 E.; latitude $37^{\circ} 37'$ N., longitude $109^{\circ} 27' 30''$ W.; I set off $37^{\circ} 37'$ N. on the lat. arc, $23^{\circ} 07'$ N. on the decl. arc; and, at 3h 04m p. m., l. m. t., determine with the solar a meridian, and mark a point thereof, on a stake set in the ground, 8 chs. N. of my station.

July 1: At my station above described, I observe Polaris as follows:

Tel.	Angle				Watch time
D.	°	'	"		h m s
Star	0	21	30	.	7 49 10
Flag	6	00	00	.	0 00 00
Star	0	22	00	.	7 50 20
R.					
Star	0	23	30	.	7 52 10
Flag	0	00	00	.	0 00 00
Star	0	24	00	.	7 53 40
Mean	0	22	45	.	7 51 20
Watch fast of l. m. t.				.	0 1 30
L. m. t. of obsn.	.	.	.	.	7 49 50
				.	7 49.8

U.C. Polaris July 1, 1912. (Gr.) 6h51.5m

Red. to long. $109^{\circ} 27'$ - 1.3

U.C. Pol. long. $109^{\circ} 27'$ 6h50.2 6 50.2

Hour angle of Polaris 0 59.6

Western Azimuth of Polaris 0° 21' 30"

Angle W. flag to star 0 22 45"

Flag bears N. 0° 01 15" W.

July 1, 1912.

July 2: At 8h04m, a. m., l. m. t., I set off $37^{\circ} 37'$ N.

on the lat. arc, $23^{\circ} 04'$ N. on the decl. arc, and at

E. Bdy. of T. 37 S., R. 23 E.

Chains.

my same station, determine with the solar, a meridian, the line of which intersects the stake 8 chs. N. of my station as determined by observation on Polaris. I therefore conclude the adjustments of my solar are satisfactory.

July 2: At 10h34m a. m., l. m. t., I set off $37^{\circ} 33' N.$ on the lat. arc, $23^{\circ} 03' N.$ on the decl. arc; and, at the cor. of Tps. 37 and 38 S., Rgs. 23 and 24 E., determine the meridian with the solar.

Thence I run, from Tp.cor., as heretofore described. North, bet. secs. 31 and 36.

Over rolling mesa covered with scattering scrub cedar and pinon timber.

6.00 Abrupt desc. over rim rock 25 ft high, bears NE. and SW.; continue desc. over broken SW. slope of canon.

30.00 Bottom of canon, 200 ft. deep, drains SW.; asc. over broken N. slope.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S 36	S 31
1912	

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

68.00 One chain W. of line, an alkali spring.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 25, 30, 31 and 36, with brass cap mkd.

T 37 S.	
R 23 E.	R 24 E.
S 25	S 30
<hr/>	
S 36	S 31

1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land mountainous.

Soil, adobe, 4th rate.

Timber, scattering scrub cedar and pinon.

July 2: At 12h04m p. m., l. m. t., I set off $23^{\circ} 02' 30''$

E. Bdy. of T. 37S., R. 23 E.

chains. N. on the decl. arc, and at the cor. of secs. 25, 30, 31 and 36, observe the sun on the meridian, the resulting lat. is $37^{\circ} 34'$ N.

Thence I run .

North, bet. secs. 25 and 30.

Asc., over broken NW. slope of canon, covered with scattering scrub cedar timber.

2.00 Rim rock, 50 ft. high, bears NE. and SW.

4.00 Top of asc., edge of mesa, 200 ft. above bottom, bears NE. and SW.; continue over level mesa, covered with dense cedar and pinon timber.

4.00 Head of canon, 3 chs. wide, drains SW..

0.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	S 25	S 30
---------------	------	------

1912

From which

A pinon, 14 ins. in diam., bears N. 79° E.,
68 lks. dist., mkd. $\frac{1}{4}$ S 30 BT.

A pinon, 12 ins. in diam., bears S. 30° W.,
71 lks. dist.; mkd. $\frac{1}{4}$ S 25 BT.

July 2, 1912.

July 3: At 9h 04m a.m., l. m. t., I set off $37^{\circ} 34' 30''$ N. on the lat. arc, $22^{\circ} 59'$ N. on the decl. arc, and at the $\frac{1}{4}$ sec. cor., bet. secs. 25 and 30, determine the meridian with the solar.

Thence I run .

North, bet. secs. 25 and 30, from the $\frac{1}{4}$ sec. cor. (continuous chaining.)

.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 19, 24, 25 and 30, with brass cap mkd.

T 37 S	
R 23 E	R 24 E
S 24	S 19
S 25 S 30	

1912

Chains.

From which

A cedar, 24 ins. in diam., bears N. 29° E.,
108 lks. dist.; mkd. T37S R24E S19 BT.

A cedar, 14 ins. in diam., bears S. $23^{\circ}30'$ E.,
113 lks. dist.; mkd. T37S R24E S30 BT.

A cedar, 18 ins. in diam., bears S. 66° W.,
98 lks. dist., mkd. T37S R23E S25 BT.

A cedar, 14 ins. in diam., bears N. 81° W.,
82 lks. dist.; mkd. T37S R23E S24 BT.

Land, rolling and broken.

Soil, adobe and stony in canon; gravel on mesa; 3rd and
4th rates.

Timber, cedar and pinon.

Thence I run

North, bet. secs. 19 and 24.

Over rolling mesa, covered with dense cedar and pinon
timber.

38.00 Dry draw, 20 lks. wide, 10 lks. deep, drains W.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor. with brass cap mkd.

S 24 | S 19

19.12

From which

A cedar, 12 ins. in diam., bears N. 60° E.,
23 lks. dist., mkd. $\frac{1}{4}$ S 19 BT.

A cedar, 12 ins. in diam., bears S. 88° W.,
5 lks. dist., mkd. $\frac{1}{4}$ S 24 BT.

46.00 Dry draw, 20 lks. wide, 5 lks. deep, drains W.

60.00 Dry draw, 30 lks. wide, 10 lks. deep, drains SW.

76.00 Dry draw, 10 lks. wide, 5 lks. deep, drains SW.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in
the ground for the cor. of secs. 13, 18, 19 and 24,
with brass cap mkd..

Chains.

	T 37 S
R 23 E	R 24 E
S 13	S 18
S 24	S 19
1912	

From which

A cedar, 12 ins. in diam., bears N. 41° E.,
61 lks. dist., mkd. T37S R24E S18 BT.

A cedar, 15 ins. in diam., bears S. 41° E.,
29 lks. dist., mkd. T37S R24E S19 BT.

A cedar, 16 ins. in diam., bears S. 31° W.,
44 lks. dist., mkd. T37S R23E S 24 BT.

A cedar, 10 ins. in diam., bears N. 39° W.,
47 lks. dist., mkd. T37S R23E S13 BT.

Land gently rolling.

Soil, loam; 2nd rate.

Timber, dense cedar and pinon.

July 3, 1912.

July 5: At 9h34m, a. m., l. m. t., I set off $37^{\circ} 35' 30''$
N. on the lat. arc, $22^{\circ} 48'$ N. on the decl. arc, and at
the cor. of secs. 13, 18, 19 and 24, determine the
meridian with the solar.

Thence I run

North, bet. secs. 13 and 18.

Over rolling mesa, covered with dense cedar and pinon
timber.

- 11.50 Dry draw, 20 lks. wide, 10 lks. deep, drains W.
15.00 Dry draw, 50 lks. wide, 3 lks. deep, drains SW.
34.00 Dry draw, 50 lks. wide, 3 lks. deep, drains SW.
40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	
S 13	S 18
1912	

From which

A cedar, 16 ins. in diam., bears N. 54° E.,
34 lks. dist., mkd. $\frac{1}{4}$ S18 BT.

Chains.

- A cedar, 12 ins., in diam., bears S. 86° W.,
12 lks. dist.; mkd. $\frac{1}{4}$ S13 BT.
- 56.00 Dry draw, 20 lks. wide, 10 lks. deep, drains NW.
- 68.00 Leaverdense cedar and pinon timber, bears NW. and SE.,
enter scattering cedar and pinion.
- 72.00 Dry draw, 10 lks. wide, 5 lks. deep, drains NW.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in
the ground for the cor. of secs. 7, 12, 13 and 18,
with brass cap mkd.

	T 37 S /
R 23 E	R 24 E
S 12	S 7'
<hr/>	
S 13	S 18

1912

From which

- A cedar, 15 ins. in diam., bears N. 47° E.,
79 lks. dist., mkd. T37S R24E S7 BT.
- A cedar, 9 ins. in diam., bears S. 18° E.,
49 lks. dist., mkd. T37S R24 E S18 BT.
- A cedar, 14 ins. in diam., bears S. 6° W.,
59 lks. dist., mkd. T37S R23E S13 BT.
- A cedar, 18 ins. in diam., bears N. 19° W.,
109 lks. dist., mkd., T37S R23E S12 BT.

Land; rolling.

Soil, sandy loam; 1st rate.

Timber, cedar and pinon.

July 5, 1912.

July 6: At 9h 34m, a. m., 1. m. t., I set off $37^{\circ} 36' m30''$ N. on the lat. arc, $22^{\circ} 42'$ N. on the decl. arc,
and at the cor. of secs. 7, 12, 13 and 18, determine
the meridian with the solar.

Thence I run

North, between secs. 7 and 12.

Over rolling mesa, covered with dense cedar and pinon
timber.

- 10.00 Dry draw, 10 lks. wide, 3 lks. deep, drains W.
- 26.00 Dry draw, 20 lks. wide, 5 lks. deep, drains NW.

hains.

- 0.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor.; with brass cap mkd.

$\frac{1}{2}$	✓
S 12	S 7

1912

From which

A cedar, 14 ins. in diam., bears N. 15° E.,
22 lks. dist., mkd. $\frac{1}{4}$ S 7 BT.

A cedar, 15 ins. in diam., bears S. 42 W.,
85 lks. dist., mkd. $\frac{1}{4}$ S 12 BT.

- 0.50 Dry draw, 10 lks. wide, 5 lks. deep, drains SW.

- 3.00 Dry draw, 20 lks. wide, 5 lks. deep, drains NW.

- 0.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 1, 6, 7 and 12, with brass cap mkd.

T 37 S	
R 23 E	R 24 E
S 1 ✓	S 6 ✓
S 12 ✓ S 7	

1912

From which

A cedar, 10 ins. in diam., bears N. 25° E.,
35 lks. dist., mkd. T 37 S R 24 E S 6 BT.

A cedar, 10 ins. in diam., bears S. 49° E.,
49 lks. dist., mkd. T 37 S R 24 E S 7 BT.

A cedar, 15 ins. in diam., bears S. 17° W.,
19 lks. dist., mkd. T 37 S R 23 E S 12 BT.

A cedar, 16 ins. in diam., bears N. 75° W.,
113 lks. dist., mkd. T 37 S R 23 E S 1 BT.

Land rolling.

Soil, sandy loam, 1st rate.

Timber, dense cedar and pinon.

July 6: At 12h04m p. m., 1. m. t., I set off $22^{\circ} 41' 30''$ N. on the decl. arc, and at the $\frac{1}{4}$ sec. cor. for secs. 7 and 12, observe the sun on the meridian, the resulting lat. is $37^{\circ} 37'$ N.

E. Bdy. of T. 37 S., R. 23 E.

Chains:

Thence I run

North, bet. secs. 1 and 6.

Over rolling mesa, covered with scattering cedar and pinon timber.

40.00 Set an iron post, 3 ft. long, 1 ins. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor. with brass cap mkd.

$\frac{1}{4}$	S 1	S 6
	1912	

From which

A cedar, 20 ins. in diam., bears N. 83° E.,
42 lks. dist., mkd. $\frac{1}{4}$ S6 BT.A cedar, 16 ins. in diam., bears N. 12° W.,
20 lks. dist., mkd. $\frac{1}{4}$ S1 BT.

54.00 About four chains E. of line, a large mesa ruin.

60.00 Enter dense cedar and pinon timber, bears E. and W.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of Tps. 36 and 37 S., Rgs. 23 and 24 E., with brass cap mkd.

T 36 S	
R 23 E	R 24 E
S 36	S 31
<hr/>	
S 1	S 6
T 37 S	
1912	

From which

A cedar, 10 ins. in diam., bears N. 78° E.,
58 lks. dist., mkd. T36S R24E S31 BT.A pinon, 12 ins. in diam., bears S. 73° E.,
64 lks. dist., mkd. T37S R24E S6 BT.A cedar, 18 ins. in diam., bears S14° W.,
19 lks. dist., mkd. T37S R23E S1 BT.A cedar, 16 ins. in diam., bears N. 25° W.,
51 lks. dist., mkd. T36S R23E S36 BT.

Land, rolling.

Soil, sandy loam; 1st rate.

Timber, cedar and pinon.

July 6, 1912.

North Boundary of T. 37 S., R. 23 E.

Chains

July 8: At 8h 05m a.m. l.m.t., I set off $37^{\circ}38'N.$, on the lat. arc, $22^{\circ}30'N.$ on the decl. arc, and at the cor. of Tps. 36 and 37 S., Rgs. 22 and 23 E., which is a sandstone, $12 \times 10 \times 9$ ins. above ground, marked and witnessed as described by the surveyor general; determine the meridian with the solar.

Thence I run

East on a random line along the N. bdy. of T. 37 S., R. 23 E., setting temp. $\frac{1}{4}$ sec. and sec. cors. at intervals of 40.00 chs.; and at 477.50 chs. intersect the E. bdy. of the Tp. 196 lks. S. of the cor. of Tps. 36 and 37 S., Rs. 23 and 24 E. as established by myself on July 6: The falling answers to a correction of $0^{\circ}14'$, or 33 lks S. per mile, counting from the NE. cor. of the Tp.

July 8, 1912.

July 9: At 9h 05m a.m. l.m.t., I set off $37^{\circ}38'N.$ on the lat. arc, $22^{\circ}22'30''N.$ on the decl. arc, and at the cor. of Tps. 36 and 37 S., Rs. 23 and 24 E., determine the meridian with the solar.

S $89^{\circ}46'W.$ bet. secs. 1 and 36, marking and blazing true line.

Asc. over rolling mesa, covered with dense cedar and pinon timber.

4.00 Leave dense cedar and pinon timber, bears N. and S., enter open sage brush park.

9.00 Dry draw, 30 lks. wide, 10 lks. deep, drains S.

17.00 Enter dense cedar and pinon timber, bears N. and S.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 36

S 1
1912

from which

A cedar, 18 ins. in diam., bears S $13^{\circ}E.$, 116 lks. dist., mkd. $\frac{1}{4}$ S 1 B T

North Bdy.. of T. 37 S., R. 23 E.

Chains

- A cedar, 12 ins. in diam., bears N $15^{\circ}W.$, 31 lks. dist., mkd. $\frac{1}{2}$ S 36 B T
- 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 1, 2, 35 and 36, with brass cap mkd.

T 36 S	R 23 E
S 35	S 36
<hr/>	
S 2	S 1
T 37 S	

1912

from which

- A cedar, 10 ins.. in diam., bears N $41^{\circ}45' E.$, 75 lks. dist., mkd. T 36 S R 23 E S 36 B T
- A cedar, 18 ins. in diam., bears S $72^{\circ}E.$, 60 lks. dist., mkd. T 37 S R 23 E S 1 B T
- A cedar, 8 ins. in diam., bears S $77^{\circ}W.$, 16 lks. dist., mkd. T 37 S R 23 E S 2 B T
- A cedar, 10 ins.in diam., bears N $79^{\circ}W.$, 52 lks. dist., mkd. T 36 S R 23 E S 35 B T
- Land, rolling.
- Soil, sandy loam, 1st rate.
- Timber, cedar and pinon.

July 9: At 12h 05m p.m. l.m.t., I set off $22^{\circ}21'30''N.$ on the decl. arc, and at the cor. of secs. 1, 2, 35 and 36 observe the sun on the meridian, the resulting lat.. is $37^{\circ}38'N.$

Thence I run

S $89^{\circ}46'W.$ on true line bet. secs. 2 and 35.

Over rolling mesa, covered with dense cedar and pinon timber.

- 6.00 Dry draw, 10 lks. wide, 3 lks. deep, drains SW.
- 30.00 Start gradual desc., bears N. and S.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{2}$ sec. cor., with brass cap mkd.

$\frac{1}{2}$
S 35

S 2
1912

North Boundary of T. 37 S., R. 23 E.

Chains.

- From which
- A cedar, 8 ins. in diam., bears S. 48° W.,
31 lks. dist., mkd. $\frac{1}{4}$ S 2 BT.
 - A cedar, 12 ins. in diam., bears N. 55° W.,
24 lks. dist., mkd. $\frac{1}{4}$ S 35 BT.
 - 40.30 Dry draw, 30 lks. wide, 5 lks. deep, drains S.; asc.
 - 46.00 Top of ridge, bears N. and S.; desc.
 - 50.00 Desc. over rim rock 75 ft. high, bears N. and S., into
Alkali Canon.
 - 55.00 Leave cedar and pinion timber, bears N. and S., continue
desc. into Alkali Canon.
 - 61.00 Alkali Wash, 1 ch. wide, 15 lks. deep, drains S.; asc.
abruptly over broken W. slope of canon.
 - 72.00 Rim rock, 75 ft. high, bears N. and S., enter dense cedar
and pinion timber.
 - 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in
the ground for the cor. of secs. 2, 3, 34 and 35, with
brass cap mkd.

T36 S, R 23 E

S 34 | S 35

— | —

S 3 | S 2

T37 S

1912

From which

- A cedar, 12 ins. in diam., bears N. 65° E.,
98 lks. dist., mkd. T36S R23E S35 BT.
- A pinion, 24 ins. in diam., bears S. $76^{\circ}30' E.$,
95 lks. dist., mkd. T37S R23E S2 BT.
- A cedar, 16 ins. in diam., bears S. $18^{\circ}30' W.$,
59 lks. dist., mkd. T37S R23E S3 BT.
- A cedar, 12 ins. in diam., bears N. 41° W.,
45 lks. dist., mkd. T36S R23E S34 BT.

Land rolling and broken.

Soil, sandy loam on mesa; 1st rate. Gravel and sandy in
canon, 4th rate.

Timber, cedar and pinion.

July 9, 1912.

N. Boundary of T. 37 S., R. 23 E.

Chains.

- July 10: At 8ho5m, a. m., l. m. t., I set off $37^{\circ} 38' N.$
on the lat. arc, $22^{\circ} 15' 30'' N.$ on the decl. arc, and
at the cor. of secs. 2, 3, 34 and 35, determine the
meridian with the solar.
- Thence; S. $89^{\circ} 46' W.$; on true line bet. secs. 3 and 34.
Over rolling mesa covered with dense cedar and pinion
timber.
- 4.00 Desc. over E. slope of canon, 30 ft. deep, bears N. and S.
- 10.00 Dry draw in bottom of canon, drains SE.; asc.
- 14.00 Top of mesa; bears N. and S., continues over level land.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

 $\frac{1}{4}$
S 34S 3
1912

From which

- A cedar, 10 ins. in diam., bears N. $10^{\circ} W.$,
20 lks. dist., mkd. $\frac{1}{4}$ S 34 BT.
- A cedar, 10 ins. in diam., bears S. $5^{\circ} E.$,
51 lks. dist., mkd. $\frac{1}{4}$ S 3 BT.
- 48.00 Leave dense cedar and pinion timber, enter scattering
cedar and pinion timber.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in
the ground for the cor. of secs. 3, 4, 33 and 34, with
brass cap mkd.

T 36 S R 23 E

S 33	S 34
S 4	S 3

T 37 S

1912

From which

- A cedar, 10 ins. in diam., bears S. $20^{\circ} W.$,
75 lks. dist., mkd. T 37 S R 23 E S 4 BT.
- Dig pits, $18 \times 18 \times 12$ ins., in each sec. $5\frac{1}{2}$ ft. dist.; and
raise a mound of earth, 4 ft. base, 2 ft. high, W. of
cor.

Chains.

Land rolling.

Soil, sandy loam; 1st rate.

Timber, cedar and pinion.

July 10: At 12h 05m, p. m., l. m. t., I set off $22^{\circ} 14'$ N: on the decl. arc, and at the cor. of secs. 3, 4, 33 and 34, observe the sun on the meridian, the resulting lat. is $37^{\circ} 38' N.$

Thence, S. $89^{\circ} 46' W.$, on true line bet. secs. 4 and 33.

Over rolling mesa, covered with scattering cedar and pinion timber and sage brush undergrowth.

13.00 Leave scattering cedar and pinion timber, bears N. and S., enter open sage brush mesa.

23.00 Dry draw, 20 lks. wide, 5 lks. deep, drains SW.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor. with brass cap mkd.

$S \frac{1}{4} 33$

$S 4$
1912

From which

A cedar, 10 ins. in diam., bears N. $55^{\circ} E.$,
44 lks. dist., mkd. $\frac{1}{4} S 33$ BT.

A cedar, 12 ins. in diam., bears S. $77^{\circ} E.$,
124 lks. dist., mkd. $\frac{1}{4} S 4$ BT.

43.00 Abandoned Bluff-Monticello Road, bears N. and S.

74.00 Dry draw, 10 lks. wide, 3 lks. deep, drains SW.

80.00 Set an iron post, 3 ft. long, 3 ins. on diam., 24 ins. in the ground for the cor. of secs. 4, 5, 32 and 33, with brass cap mkd.

T 36 S	R 23 E
S 32	S 33
S 5 S 4	
T 37 S	
1912	

From which

A cedar, 24 ins. in diam., bears N. $55^{\circ} W.$,
32 lks. dist., mkd. T36S R23E S32 BT.

A cedar, 24 ins. in diam., bears N. $22^{\circ} E.$,

Chains. 213 lks. dist., mkd. T36S R23E S53 BT.

A cedar, 8 ins. in diam., bears S. 39° E.,

337 lks. dist., mkd. T37S R23E S4 BT.

A cedar, 6 ins. in diam., bears S. 36° 30' W.,

345 lks. dist., mkd. T37S R23E S5 BT.

Land rolling:

Soil, sandy loam; 1st rate.

Timber, cedar and pinon pine. Undergrowth, sagebrush.

July 10: At 13h05m, p. m., 1. m. t., I set off 37° 38' N. on the lat. arc, 22° 13' N. on the decl. arc, and at the cor. of secs. 4, 5, 32 and 33, determine the meridian with the solar.

Thence, S. 89° 46' W. on true line bet. secs. 5 and 32.

Over rolling mesa, covered with scattering cedar and pinion timber and sage brush undergrowth.

3.00 Dry draw, 40 lks. wide, 3 lks. deep drains SW.

14.00 Dry draw, 15 lks. wide, 2 lks. deep, drains S.

30.00 Dry draw, 60 lks. wide, drains S.; asc. gradually.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 32

S 5

1912

From which

A pinon, 16 ins. in diam., bears N. 82° W.,

201 lks. dist., mkd. $\frac{1}{4}$ S32 BT.

A cedar, 12 ins. in diam., bears S. 70° W.,

209 lks. dist., mkd. $\frac{1}{4}$ S5 BT.

66.00 Enter dense cedar and pinon timber.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 31, 32, 5 and 6, with brass cap mkd.

T 36 S R 23 E	
S 31'	S 32'

S 6'	S 5'
T37'S	
1912	

From which

(18)

N. Boundary of T. 37 S., R. 23 E.

Chains.

A cedar, 12 ins. in diam., bears N. 49° E.,
36 lks. dist., mkd. T36S R23E S32 BT.

A cedar, 16 ins. in diam., bears S. 41° E., 61
61 lks. dist., mkd. T37S R23E S5 BT.

A cedar, 12 ins. in diam., bears S. 16° W.,
89 lks. dist., mkd. T37S R23E S6 BT.

A cedar, 24 ins. in diam., bears N. 88° W.,
75 lks. dist., mkd. T36S R23E S31 BT.

Land rolling.

Soil, sandy loam; 1st rate.

Timber cedar and pinion.

Undergrowth, sagebrush.

July 10, 1912.

July 11: At 9h05m, a. m.; 1. m. t., I set off $37^{\circ} 38'$
N. on the lat. arc, $22^{\circ} 07'$ N. on the decl. arc, and at
the cor. of secs. 5, 6, 31 and 32, determine the meri-
dian with the solar.

Thence I run

S. $89^{\circ} 46'$ W. on true line bet. secs. 6 and 31.

Asc; over rolling mesa, covered with dense cedar and pinion
timber.

14.00 Top of low ridge, nears N. and S.; desc.

22.00 Dry draw, 30 lks. wide, 5 lks. deep, drains S.; asc.

28.00 Top of ridge, bears N. and S.; desc. over broken E. slope
of Recapture Canon.

30.00 Rim rock, 150 ft. high, bears N. and S.; desc abruptly
over E. slope of Recapture Canon.

36.00 Recapture Creek: 20 lks. wide, 1 lk. deep; water clear,
course S. Creek in canon 250 ft. deep.; asc over
broken W. slope of canon.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 31

S 6

1912

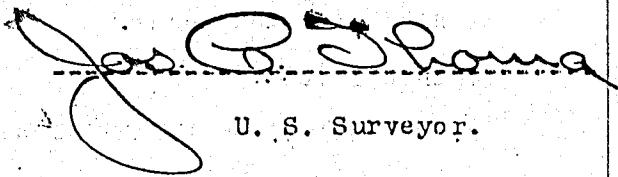
From which

N. Boundary of T. 37 S., R. 23 E.

Chains.

- A cedar, 10 ins. in diam., bears N. 15° W.,
8 lks. dist., mkd. $\frac{1}{4}$ S31 BT.
- A cedar, 10 ins. in diam., bears S. 61° E.,
16 lks. dist., mkd. $\frac{1}{4}$ S6 BT.
- 43.00 Rim rock, 130 ft. high, bears N. and S.
- 43.50 S. 10 lks. a barbed wire fence, bears E. and W.; continue along same.
- 44.00 Top of low ridge, bears N. and S.; desc. gradually over rolling mesa land.
- 68.00 Leave dense cedar and piñon timber, bears N. and S., continue over open sage brush mesa.
- 77.50 The cor. of Tps. 36 and 37 S., R's 22 and 23 E.
Land rolling and broken.
Soil, on mesa; sandy loam; 1st. rate.
Timber cedar and piñon.

July 11, 1912.


Jos. R. Shoura
U. S. Surveyor.

Latitudes, departures and closing errors.

Lines Designated	Bearing.	Dist.	Latitudes		Departures	
			N.	S.	E.	W.
Colo. G. M.	North	400.00	400.00	...	...	...
Colo. G. M.	N. $0^{\circ} 08' E.$	40.07	40.07	...	.09	...
Colo. G. M.	N. $0^{\circ} 23' E.$	39.31	39.31	...	.27	...
N. Bdy.	N. $89^{\circ} 46' E.$	477.50	1.94	...	477.50	...
E. Bdy.	South	480.00	...	480.00	...	...
S. Bdy.	S. $89^{\circ} 48' W.$	477.46	...	1.67	...	477.46
	Convergency	.55	...	...	.55	...
Totals			481.32	481.67	478.41	477.46
Errors in lat. and dep.			.17	.35	.95	

Retracement of part of the Colorado Guide Meridian in T.37S.

Chains.

06

July 24, at 3h.p.m. I set off $37^{\circ}37'$ On the lat.arc and $19^{\circ}49'30''$ N.on the dec.arc, and determine a meridian at the cor.of secs.1,6,7 and 12, a sandstone 14 X 7 X 8 in.above ground, firmly set, and marked and witnessed as described by the Surveyor General.

Thence I run.North, on retracement of the line betsecs. 1 and 6.

40.07 Fall 9 lks.W.of the $\frac{1}{4}$ sec.cor.a sandstone, 12 X 8 X 10 in. above ground, firmly set, and marked and witnessed as described by the Surveyor General.

The course of this $\frac{1}{2}$ mile is therefore $N.0^{\circ}08'E.$

79.38 I fall 36 lks.W.of the cor of Tps.36 and 37 S.Rgs.22 and 23 E.A sandstone, 12 X 10 X 9 in.above surface, firmly set and marked and witnessed as described by the Surveyor General.

The course of this $\frac{1}{2}$ mile is $N.0^{\circ}23'E.$

Daniel B. Miller

U.S. Surveyor.

For oaths of U.S. Surveyors and certificates of assistants see book "V". of this group.

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Page

BOOK A-412

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability,
....., U. S. Surveyor, during the periods and in the capacities
ed opposite our several signatures, in surveying all those parts or portions of

For certificate of assistants see book "V" T.39 S., R.26 E.

Meridian, in the State of

which are represented in the foregoing field notes as having been executed by him, and under his direction; and that said survey has been, in all respects, to the best of our knowledge and belief, well and successfully executed.

Subscribed and certified to before me on the dates of the final service as shown above.

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____.

For final oaths of U.S. Surveyors see book "V" T. 39 S., R. 26 E.

of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor

Subscribed by said _____, and sworn to before me
this _____ day of _____, 191_____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 2, 1915

The foregoing field notes of the survey of the East and North Boundaries of Township No. 37 South, Range No. 23 East; and retracement of part of the Colorado Guide Meridian, Township No. 37 South, between Ranges 22 and 23 East of the Salt Lake Base and Meridian, Utah

executed by Daniel B. Miller and Joseph C. Thoma
under his special instructions dated March 26, 1912, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and the
surveys they describe, are hereby approved.

U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

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Page

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Page

BOOK A-412

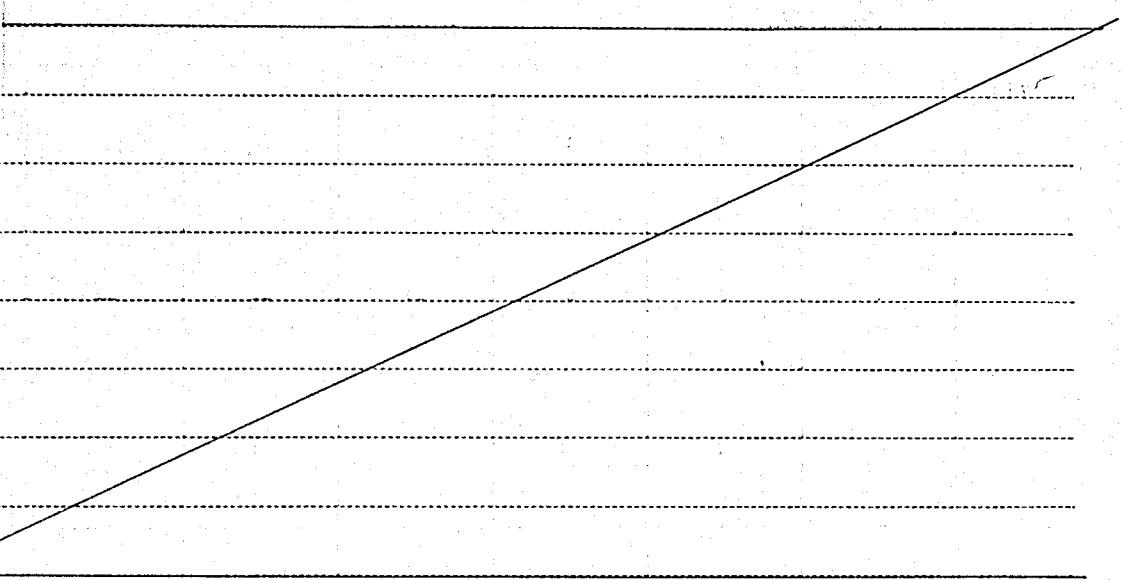
E.R. FIELD NOTES

OF THE SURVEY OF THE

S.U.B.D.I.V.I.S.I.O.N.A.L L.I.N.E.S.

O.F.

T. 37 S., R. 23 E.



Of the Salt Lake Base and Meridian,

e State of U T A H.

EXECUTED BY

Daniel B. Miller and Jos. C. Thoma,

e capacity of U. S. Surveyor's, under instructions dated March 26th, 1912,

d by the United States Surveyor General to govern surveys included in

o No. 16, which were approved by the Commissioner of the General Land

, April 2, 1912.

Survey commenced July 1st, 1912.

Survey completed July 23rd, 1912.

BOOK A-412

INDEX DIAGRAM.

Township *Range*

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Survey of T.37 S.R.23 E.

Survey commenced July 1st, 1912 and executed with a Keuffel & Esser Solar Transit No. 20037, with solar attachment, the horizontal limb of which is provided with two double verniers, reading to single minutes of arc, which is also the least count of the verniers of the lat. and dec. arcs.

The instrument was examined and tested by me as Assistant Supervisor of Surveys, on the true meridian at Salt Lake City, January 22nd, 1912 and found in adjustment in all its parts.

At my camp near the center of sec. 9, T.37 S.R.23 E. Approx. lat. $37^{\circ}35'$ and long $109^{\circ}27'$ W. I examine the adjustments of the transit, and correct the level and collimation errors then to test the solar apparatus, by comparing its indications, resulting from solar observations, made during a.m. and p.m. hours, with a meridian determined by observations on Polaris, I proceed as follows.

I set my instrument over a peg driven in the ground, and at $3h\ 04m$ p.m. l.m.t. July 1st, I set off $37^{\circ}37'$ on the lat. arc, and $23^{\circ}07'$ N. on the dec. arc and determine a meridian with the solar, and sight a small object in line therewith about $\frac{1}{2}$ mile N. of the station.

At 8.07 p.m. by my watch which is set at l.m.t. with my instrument over the same point as my p.m. solar, I make an hour angle observation by sighting on Polaris west of the meridian, taking four sights, two with the telescope in direct position and two in reversed position, noting a small object in line therewith, in the mean position about $\frac{1}{2}$ mile to the N. of my station.

U.C. Polaris, July 1st, Gren.	6h. 51m. 5.a.m.
Red. to lon. 109.27	<u>I 3.</u>
U.C. l.m.t. ✓	6h. 50 .2m. a.m.
Equivalent to L.C.	6h. 48 .2m. p.m.
L.M.T. of Observation	8h. 04 .0m. p.m.
Hour angle	<u>Ih. 15 .8m.</u>
Azimuth	$0^{\circ}29' W$

Survey of T.37 S.R.23 E.

I leave the instrument on this point, and July 2nd at 7; a.m. turn off $0^{\circ}30'$ to the E. from my Polaris sight, and find the meridian thus secured, falls on my solar meridian determined yesterday.

July 2, 1912. At 7h.30m.a.m.l.m.t. at the same point, I set off $37^{\circ}37'$ on the lat.arc, and $23^{\circ}04'$ N. on the dec.arc and find the meridian thus secured, marks the same meridian as the Polaris observation.

I therefore conclude that the adjustment of the solar apparatus is in satisfactory working condition.

During the progress of the surveys of the exterior and subdivisional lines in this township, I made frequent tests of my instrument over this meridian, testing daily as opportunity afforded for time, at noon, keeping my watch within one minute of the apparent time.

Subdivision of T.37 S.R.23 E.

ains.

July 2nd, At D0:a.m.l.m.t. I set off $37^{\circ}33'$ on the lat.arc, and $23^{\circ}03'$ N.on the dec.arc, and determine a meridian at the corner of secs. I, 2, 35 and 36 on the S.bdy. of the township, heretofore described.

Thence I run,

N. $0^{\circ}01'$ W. bet. secs. 35 and 36.

Over broken S.E.slope of Alkali Canon, through dense scrub cedar and scattered pinon, gradually ascending.

Set an iron post 3 ft.long, 1 in.in dia., 24 ins.in the ground, for the $\frac{1}{4}$ sec.cor. with brass cap marked.

$\frac{1}{4}$	S 35	S 36
---------------	------	------

I9I2

from which, a sandstone boulder 8 X 6 X 3 ft. marked X at a point N. $18^{\circ}45'$ E. 10 lks.dist. and B O near cross.

A sandstone boulder, 20 X 15 X 8 ft. with a X cut brs.

S. $76^{\circ}45'$ W. 31 lks.dist. and B O cut near cross.

Draw, dry, cse. E.

Set an iron post 3 ft.long, 2 in.in dia., 24 ins.in the ground, for the corner of secs. 25, 26, 35 and 36, with brass cap, marked,

T 37 S	R 23 E
S 26	S 25
S 35	S 36

I9I2

from which, a scrub cedar, 10 ins.in dia., brs, S $11^{\circ}15'$ W. 110 lks.dist. marked, T 37 S R 23 E S 35 B T

No other suitable trees for marking within limits.

Raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of corner.

Land broken.

Soil, dark reddish loose sandy texture, and stony. 2nd, to poor 4th, rate.

Timber, scrub cedar and pinon.

July 3:

The sun was obscured by clouds at noon, observation for test of instrumental lat.impossible.

Subdivision of T.37 S.R.23 E.

Chains.	Thence I run, N. $89^{\circ}48' E.$ on random line bet. secs. 25 and 36.
40.00	Set temp. $\frac{1}{4}$ sec.cor.
✓ 79.92	Intersect the E.bdy.of the township, 22 lks.N.of the cor.of secs. 25,30,31 and 36, heretofore described. Thence, S. $89^{\circ}57' W.$ On true line bet. secs. 25 and 36. Over broken mesa slope draining SW.int ^P Alkali Canon. Through scrub cedar and pinon.
4.00	W.edge of mesa.desc.sandstone ledge brs,N&S.40 ft.wall nearly perpendicular.Over immense broken boulders.
21.50	Canon draw,cse.SW.200 ft.below top of ledges.asc.
✓ 39.96	Set an iron post, 3 ft.long, 1 in.in dia., 24 ins.in a mound of stone and earth, on bed rock, for the $\frac{1}{4}$ sec.cor. with brass cap marked $\begin{array}{r} \frac{1}{4} \\ S\ 25 \\ \hline S\ 36 \\ 1912 \end{array}$
	raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high N.of the cor. Trees in limits too scrubby to mark for B Ts.
56.50	Rocky spur, proj.S.75 ft.above draw.desc.
76.00	Alkali Wash, 10 ft.deep, 30 lks.wide,cse.S.75 ft.below spur gradual asc.
✓ 79.92	The corner of secs. 25,26,35 and 36. Land,broken. Soil,sandy texture,very stony.poor 4th,rate. Timber,scrub cedar and pinon. Dense sagebrush on edges of Alkali Wash. Scant grazing. July 3: At this corner at 2h 30m.p.m.1.m.t.I set off $37^{\circ}34'$ on the lat.arc, and $23^{\circ}02' N.$ on the dec.arc and determine a meridian with the solar.

(8)

Subdivision of T.37 S.R.23 E.

hains.

Thence N.0°01'W.

Bet. secs. 25 and 26,

Over broken W.slope of Alkali Canon, through dense cedar, and scat. pinon, over drains and washes, dry, draining E.

Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor. with brass cap marked

$\frac{1}{4}$	S 26	S 25
---------------	------	------

1912

from which, a scrub cedar, 12 ins. in dia., brs., N.62°30'E.

16 lks. dist. marked, $\frac{1}{4}$ S 25 B.T.

A cedar 16 ins. in dia., brs. S.74°W. 50 lks. dist, mkd.

$\frac{1}{4}$ S 26 B.T.

Wash, dry, 10 lks. wide, cse. SE. asc. grad.

Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for the corner of secs. 23, 24, 25 2nd 26 with a brass cap marked

T 37 S	R 23 E
S 23	S 24
<hr/>	
S 26	S 25

1912

From which a cedar, 10 ins. in dia., brs. N.8°15'E. 165 lks.

Marked, T 37 S R 23 E S 24 B.T.

A cedar 6 ins. in dia., brs. S 41°30'E. 32 lks. dist.

Marked, T 37 S R 23 E S 25 B.T.

A pinon, 14 ins. in dia., brs. S 41°30'W. 165 lks. dist.

Marked, T 37 S R 23 E S 26 B.T.

A pinon 4 ins. in dia., brs. N.61°30'W. 64 lks. dist.

Marked, T 37 S R 23 E S 23 B.T.

Land, broken.

Soil, stony and poor 4th, rate.

Timber, scrub cedar & pinon, scattered.

Scant grazing.

July 2nd, 1912.

Subdivision of T. 37 S.R.23 E.

Chains.

- July 7th, 1912 at 10 a.m.l.m.t. I set off $37^{\circ}35'$ on the lat. arc; $22^{\circ}36'$ N. on the dec. arc, and determine a meridian at the corner of secs. 23, 24, 25 and 26.
 Thence I run
 N. $89^{\circ}57'$ E. on random line bet. secs. 24 and 25.
 Set temp. $\frac{1}{4}$ sec. cor.
 Intersect the E. bdy. of the township, 17 lks. N. of the cor. of secs. 19, 24, 25 and 30, heretofore described.
 Thence, N. $89^{\circ}56'$ W. on true line bet. secs. 24 and 25.
 Over broken mesa, through dense cedar and pinon and short sagebrush. Grad. desc.
 Edge of mesa, ledge of sandstone perpendicular desc. of 40 ft. N & S. ledges.
 Set an iron post 3 ft. long, 1 in. in dia., $\frac{1}{4}$ ins. in the ground, for the $\frac{1}{4}$ sec. cor. with a brass cap marked

$$\begin{array}{c} \frac{1}{4} \\ \text{S } 24 \\ \hline \text{S } 25 \end{array}$$

 I912
 From which, a sandstone boulder 15 X 15 X 4 ft. with a X mark which brs. S. $33^{\circ}W$. 6 lks. dist. and B O cut near the cross.
 A sandstone boulder, 4 X 3 X 3 ft. with a X mark cut bearing North, 22 lks. and B O cut near the X mark.
 This corner is 150 ft. below the top of ledge.
 Alkali Canon Wash. 10 ft. deep, 70 lks. wide, dry, cse. S. Asc. E. slope, of mesa. This point is 200 ft. below the top of the mesa ledge.
 The cor. of secs. 23, 24, 25 and 26.
 Land, broken.
 Soil, rocky & gravelly, poor 4th, rate.
 Timber, dense cedar and pinon.
 Short sagebrush undergrowth sagebrush. 33.00 chs.
 Scant grazing.

(7)

Subdivision of T.37 S.R.23 E.

- Thence N.0°01'W.betsecs.23 and 24.
- Over broken E.slope of Alkali Canon,gradually ascending through dense cedar and pinon.
- 27.00 Enter dense sagebrush,E & W.
- 40.00 Set an iron post 3 ft.long,1 in.in dia.,24 ins.in the ground,for the $\frac{1}{4}$ sec.cor.with brass cap,marked

$$\begin{array}{c|c} \frac{1}{4} S 23 & S 24 \\ \hline \end{array}$$

I9I2
- from which,a cedar,14 ins.in dia.,brs.S.54°E.I47 lks.dist marked, $\frac{1}{4}$ S 24 B T
- A cedar,7 ins.in dia.,brs.N.77°W.68 lks.dist.marked,
 $\frac{1}{4}$ S 23 B T
- 47.50 R.bank of Alkali Canon wash,10 ft.deep,70 lks.wide,cse.
SE.dry.
- 58.00 L.bank of same wash,cse.SW.
- 65.00 R.bank of same wash,cse.SE.
- 70.00 Begin ascent of E side of Alkali Canon,on W.slope of mesa.banks.
- 80.00 Set an iron post 3 ft.long,2 ins.in dia.,24 ins.in the ground,for the cor.of secs.I3,I4,23 and 24,with a brass cap marked,

$$\begin{array}{c|c} T 37 S & R 23 E \\ \hline S I4 & S I3 \\ \hline S 23 & S 24 \end{array}$$

I9I2
- raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft.high W.of cor.
- Trees in distance too scrubby to mark for B.Ts.
- Land very broken.
- Soil,stony,poor 4th,rate.
- Timber,Scrub cedar and pinon.
- Undergrowth,short sagebrush,
- Scant grazing.

July 7th,19I2.

Subdivision of T.37 S.R.23 E.

Chains.	July 10th, I run, S.89°56' E. on random line, bet. secs. 13 and 24.
40.00	Set temp. $\frac{1}{4}$ sec.cor.
79.92	Intersect the E.bdy.of the township I6 lks S. of the corner of secs. 13, 18, 19 and 24, heretofore described. Thence S.89°57' W.on true line bet. secs. 13 and 24. Descending gradually over W.slope.
39.96	Set an iron post 3 ft.long, 1 in.in dia., 24 ins.in the ground, for the $\frac{1}{4}$ sec.cor, with brass cap, marked, $\frac{1}{4}$ S 13 S 24 1912 from which, a pinon, 12 in.in diam.brs. S.56°E.56 lks.dist. marked, $\frac{1}{4}$ S 24 B T No other trees in distance fit to mark for B.Ts. raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high N.of the cor Continue grad.asc.from cor.
53.00	W edge of mesa, over perpendicular sandstone ledge, 30 ft. brs.N. and S.20°W.desc.abruptly over southwesterly slope of mesa, into Alkali Canon.
79.92	175 ft.below mesa. The corner of secs. 13, 14, 23 and 24. Land broken. Soil, rocky poor 4th, rate. Timber, scrub cedar & pinon. Scant grazing. July 10: At this corner at 2h.p.m.l.m.t. I set off 37°35'30" on the lat.arc; 22°I3N.on the dec.arc, and determine a meridian with the solar.

Subdivision of T.37 S.R.23 E.

chains.

N.0°01'W.betsecs.I3 and I4.

Over broken W.slope of SW.side of mesa, on E.side of
 Alkali Canon, over very broken surface of boulders and
 small washes and ridges. Through dense cedar & pinon.
 Wash, dry, 3 ft. deep, 6 lks. wide, coarse SW.
 Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in earth
 and stone, for the $\frac{1}{4}$ sec.cor. with a brass cap marked

$$\frac{1}{4} \text{ S I4 } | \text{ S I3 }$$

I9I2

from which a cedar 8 ins. in dia., brs. S.40°E.60 lks. dist.
 marked, $\frac{1}{4}$ S I3 B T

A cedar, II ins. in dia., brs. N.56°30'W.36 lks. dist.
 marked, $\frac{1}{4}$ S I4 B T

Continuing ascent over great blocks of sandstone.

59.50 Edge of mesa, 150 ft. above the $\frac{1}{4}$ sec.cor. over sandstone
 ledge. 15 ft. perpendicular, bearing E&W.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in md. of
 stone and earth, for the cor.of secs.II,I2,I3 and I4.
 with a brass cap, marked,

$$\begin{array}{c|c} \text{T 37 S} & \text{R 23 E} \\ \hline \text{S II} & \text{S I2} \\ \hline \text{S I4} & \text{S I3} \end{array}$$

I9I2

from which a cedar I4 in. in dia., brs. N.61°E.27 lks. dist.
 marked, T 37 S R 23 E S I2 B T

A pinon, 8 in. in dia., brs. S.18°30'E.110 lks. dist.
 marked, T 37 S R 23 E S I3 B T

A pinon, 15 ins. in dia., brs. S.47°15'W.90 lks. dist.
 marked, T 37 S R 23 E S I4 B T

A pinon, 12 ins. in dia., brs. N.16°30'W.107 lks. dist.
 marked, T 37 S R 23 E S II B T

Land very broken.

Soil, very stony and so washed as to be valueless except
 the scrub timber. Poor 4th, rate.Timber, scrub cedar and pinon. scattering to dense in
 patches.

July 10th, 1912.

(10)

Subdivision of T.37 S R 23 E.

Chains.

July 12th, 1912. At 10: a.m. I. M. T. I set off $37^{\circ}36'30''$ on the lat. arc; $21^{\circ}58'N$. on the dec. arc and determine a meridian with the solar at the cor. of secs. II, I2, I3 and I4. Thence I run, N. $89^{\circ}57'E$. on random line bet. secs. I2 and I3.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
40.02 Intersect the E. bdy. of the township, I3 lks. N. of the cor. of secs. 7, I2, I3 and I6, heretofore described. Thence, N. $89^{\circ}57'W$. on true line bet. secs. I2 and I3. Gradual descent on mesa, through sct. cedar and pinon, into canon.
6.00 Wash, dry, 3 ft. deep, 5 ft. wide, cse. S. $20^{\circ}W$.
40.01 Set an iron post 3 ft. long, 1 in. in dia, 24 ins. in earth and stone, for the $\frac{1}{4}$ sec. cor. with brass cap marked

$\frac{1}{4}$
S I2
S I3
1912

from which, a cedar, 8 in. in dia, brs. S. $15^{\circ}W$. 39 lks. dist. marked, $\frac{1}{4}$ S I3 B T

A cedar, 8 ins. in dia., brs. N. $22^{\circ}30'W$. 81 lks. dist. marked, $\frac{1}{4}$ S I2 B T

continue gradual descent.

44.00 Grad. asc.

80.02 The corner of secs. II, I2, I3 and I4.

Land, rolling.

Soil, dark reddish, sandy texture, 2nd, to 4th, rate.

Timber, scrub cedar and pinon, scattered to dense patches. scant grazing.

July 13:

At this corner at apparent noon. I set off $21^{\circ}57'N$. on the dec. arc and observe the sun on the meridian, finding the lat. arc reading $37^{\circ}36'30''$, which shows the instrument latitude to be practically correct.

Subdivision of T.37 S.R.23 E.

Chains.

July 17; At. 9; a.m.l.m.t. I set off $37^{\circ}36'30''$ on the lat. arc, and $21^{\circ}12'30''$ N. on the dec. arc and determine a meridian at the corner of secs. II, I2, I3 and I4.

Thence N. $6^{\circ}01'W.$ bet. secs. II and I2.

Through dense cedar and pinon, over broken surface, draining S.W. gradual descent.

13.50 Spring of alkali water at head of gulch, course W.

25.00 Desc. abruptly 75 ft.

27.50 Canon gulch, cse. SW. asc. 75 ft.

30.00 Top of asc. to mesa rim, cse. SW. & NE. grad. asc.

40.00 Set an iron post 3 ft. long 1 in. in dia., 24 ins. in the ground, for the cor. with brass cap, marked

$\frac{1}{2}$	S II	S I2
1912		

from which, A pinon, 18 ins. in dia., brs. S. $4^{\circ}30'E.$ 17 lks.

marked, $\frac{1}{4}$ S I2 B T

A pinon, 15 ins. in dia., brs. S. $65^{\circ}W.$ 31 lks. dist.

marked, $\frac{1}{4}$ S II B T

continue grad. asc.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for the cor. of secs. I, 2, II and I2, with brass cap, marked,

T 37 S	R 23 E
S 2	S I
S II	S I2
1912	

from which, a cedar, 7 ins. in dia., brs. N. $68^{\circ}30'E.$ 23 lks. dist.

marked, T 37 S R 23 E S I B T

A cedar, 8 ins. in dia., brs. S. $61^{\circ}30'E.$ 30 lks. dist.

marked, T 37 S R 23 E S I2 B T

A cedar, 10 ins. in dia., brs. S. $35^{\circ}W.$ 52 lks. dist.

marked, T 37 S R 23 E S II B T

A cedar, 12 ins. in dia., brs. N. $36^{\circ}W.$ 35 lks. dist.

marked, T 37 S R 23 E S 2 B T

Land broken.

Soil, sandy texture, 2nd, to 4th, rate.

Timber, cedar and pinon pine.

Subdivision of T.37 S.R.23 E.

Chains.

Thence I run S.89°57'E, on random, bet. secs. I and I2.

40.00 Set temp. $\frac{1}{4}$ sec.corner.

80.10 Intersect the E.bdy.of the township, at the cor.of secs. I, 6, 7 and I2, heretofore described.

Thence, N.89°57'W.on true line bet.secs.I and I2.

Over rolling mesa, through dense cedar and pinon.grad.des

40.05 Set an iron post, 3 ft.long, 1 in.in dia., 24 ins.in the ground, for the $\frac{1}{4}$ sec.cor.with brass cap marked,
$$\begin{array}{c} \frac{1}{4} \\ \text{S I} \\ \hline \text{S I2} \\ \text{1912} \end{array}$$

from which, a cedar, 7 ins.in dia., brs.N.20°E.67 lks.

marked, $\frac{1}{4}$ S I B T

A cedar, 10 ins.in dia., brs.S.34°30'E.38 lks.dist.

marked $\frac{1}{4}$ S I2 B T

44.25 Wash, 15 lks.wide,dry,cse.S.over grass flat.leave timber.

53.50 Wash, 5 ft.deep, 15 lks.wide,dry,cse,S.enter timber. gradual ascent.

80.10 The cor.of secs.I,2,II and I2.

Land,rolling.

Soil,sandy,dark reddish,loam.Ist.rate if irrigated.

Timber,dense scrub cedar & pinon.about 7I.00 chs.

Scant grazing.

July 17, 1912.

Subdivision of T.37 S.R.23 E.

ains. July 18: at 8.30:a.m.l.m.t. I set off $37^{\circ}37'$ on the lat.
arc; $21^{\circ}03'$ N.on the dec.arc, and determine a meridian at
the corner of secs.I,2,II and I2.
Thence, I run
N. $0^{\circ}01'$ W.on random line betsecs.I and 2.
Set temp. $\frac{1}{2}$ sec.cor.
Intersect the N.bdy.of the township at 10 lks.W.of cor.
secs.I,2,35 and 36, heretofore described.
Thence I run
S. $0^{\circ}03'$ W.on true line betsecs.I and 2.
Over rolling mesa, through dense cedar and pinon,
The remains of a prehistoric mesa ruin brs.E.I.00 ch.
Set an iron post 3 ft.long, 1 in.in dia., 24 ins.in the
ground, for the $\frac{1}{2}$ sec.cor.with brass cap marked.

$\frac{1}{2}$ S 2 | S I

1912

from which, a pinon, 6 ins.in dia., brs.N. 60° E.23 lks.dist.
marked, $\frac{1}{4}$ S I B T
A pinon, 7 ins.in dia., brs.S 20° W.50 lks.dist.
marked, $\frac{1}{4}$ S 2 B T
79.75 The cor.of secs.I,2,II and I2.
Land rolling.
Soil, sandy dark reddish, loose texture. Ist, rate if irrigated.
Timber, scrub cedar & pinon.
Scant grazing.

July 18, 1912

Subdivision of T.37 S.R.23 E.

Chains.

- July 3: At 8:30 A.m.l.m.t. I set off $37^{\circ}33'$ on the lat.arc
 $22^{\circ}59'$ N. on the dec.arc and determine a meridian with the
 solar at the cor.of secs. 2, 3, 34 and 35 on the S.bdy of
 the township, heretofore described.
 Thence I run,
 N. $0^{\circ}01'$ W. bet.secs. 34 and 35.
 Over broken land, through dense cedar and pinon.
 Ascend, 50 ft.
 4.00 Edge of mesa. Enter Short sagebrush, brs., E&W.
 40.00 Set an iron post 3 ft. long, 1 in. in dia. 24 ins. in the
 ground for the $\frac{1}{4}$ sec.cor. with a brass cap marked

$$\begin{array}{c|c} \frac{1}{4} & S 34 \\ \hline & S 35 \end{array}$$

 I9I2
 from which, a cedar, 12 ins. in dia., brs. N. $77^{\circ}30'$ W. 80 lks.
 marked, $\frac{1}{4}$ S 34 B T
 A cedar, 6 ins. in dia., brs. N. $70^{\circ}30'$ E 57 lks. dist.
 marked, $\frac{1}{4}$ S 35 B T
 74.00 Draw, dry, cse. E.
 80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the
 ground, for the cor.of secs. 26, 27, 34 and 35, with a brass
 cap marked

$$\begin{array}{c|c} T 37 & S R 23 E \\ \hline S 27 & S 26 \\ \hline S 34 & S 35 \end{array}$$

 I9I2
 A cedar, 10 ins. in diam., brs. N. $64^{\circ}30'$ E. 81 lks. dist
 marked, T 37 S R 23 E S 26 B T
 A cedar, 12 ins. in diam., brs., S. 38° E. 104 lks. dist.
 marked, T 37 S R 23 E S 35 B T
 A cedar, 13 ins. in diam., brs., S. $53^{\circ}30'$ W. 77 lks. dist.
 marked, T 37 S R 23 E S 34 B T
 A cedar, 10 ins. in diam., brs. N. $73^{\circ}30'$ W. 81 lks. dist.
 marked, T 37 S R 23 E S 27 B T
 Land broken.
 Soil, dark rich reddish, and loose texture sand. Ist. rate
 if irrigated.
 Timber, cedar and pinon pine. Undergrowth, sagebrush.

Subdivision of T.37 S.R.23 E.

mins.

0.00

9.80

39.90

75.00

79.80

Thence I run

N.89°48'E.on random line bet.secs.26 and 35.

Set temp. $\frac{1}{4}$ sec.cor.

Intersect the N & S line 15 lks.N.of the cor.of secs.

25.26,35 and 36.

Thence,S.89°54'W.on true line bet.secs 26 and 35.

Ascending W.slope of Alkali Canon.following N.side of a deep canon leading down from the west.Over very broken surface,through scat.cedar & pinon.

Set an iron post 3 ft.long,1 in.in diam., $\frac{1}{4}$ ins.in mound of stone and earth,on bed rock,for the $\frac{1}{4}$ sec.cor.with brass cap marked

$\frac{1}{4}$
S 26
S 35
1912

from which,A sandstone boulder,20 X 20 X 15 ft.with a X cut facing cor.brs.N.24°W.47 lks.marked B O near X.

A cedar 8 ins.in diam.brs.S.32°30'W.78 lks.

marked, $\frac{1}{4}$ S 35 B T

Top of ascent,E.edge of mesa.brs.N&S.over rolling surface.

The corner of secs.26,27,34 and 35.

Land broken,

Soil,canon side washes,barren and stony.poor 4th,rate.

Timber,scrub cedar and pinon,

Scant grazing.

July 3,: At this cor.at apparent noon I set off 22°58'N.on the dec.

arc and observe the sun on the meridian.The observed latitude is 37°34' which is sufficiently correct.

July 3rd,1912.

Subdivision of T.37 S.R.23 E.

Chains.	July 6th: At 10; a.m.l.m.t. I set off $37^{\circ}34'$ on the lat. arc; $22^{\circ}42'$ N. on the dec. arc, and determine a meridian at the corner of secs. 26, 27, 34 and 35. Thence, N. $0^{\circ}01'$ W. bet. secs. 26 and 27. Over broken surface, through dense cedar & pinon, draining east. grad desc.
30.00	Enter short sage brush, cedar & pinon more scattered.
40.00	Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor. with a brass cap, marked
	$\frac{1}{4}$ S 27 | S 26
	1912.
	from which, a cedar, 12 ins. in diam. brs. S. $23^{\circ}30'$ E. 151 lks. marked, $\frac{1}{4}$ S 26 B T
	A cedar, 12 ins., in diam., brs. S. $81^{\circ}W.$ 54 lks. dist. marked, $\frac{1}{4}$ S 27 B T
80.00	Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for the cor. of secs. 22, 23, 26 and 27, with brass cap marked
	T 37 S | R 23 E S 22 | S 23 S 27 | S 26
	1912
	from which a cedar, 10 ins. in diam. brs. N. $44^{\circ}30'$ E. 186 lks. marked T 37 S R 23 E S 23 B T.
	A pinon, 6 ins. in dia, brs. S. $55^{\circ}E$ 22 lks. dist. marked, T 37 S R 23 E S 26 B T
	A pinon, 6 ins. in diam., brs. N. $33^{\circ}30'$ W. 55 lks. dist. marked, T 37 S R 23 E S 22 B T
	A pinon, 6 ins. in diam., brs. S. $29^{\circ}W.$ 33 lks. dist. marked, T 37 S R 23 E S 27 B T
	Land broken and rolling.
	Soil, dark reddish sandy texture, 2nd, to poor 4th, rate.
	Timber, scrub cedar and pinon. 30.00 chs.
	Scat. timber & short sagebrush, 50.00 chs.

Subdivision of T.37 S.R.23 E.

- chains. Thence N. $89^{\circ}54'$ E.on random line betsecs.23 and 26.
- 40.00 Set temp. $\frac{1}{4}$ sec.cor.
- 79.79 Intersect the N & S line II lks.S.of the cor.of secs. 23,24,25 and 26.
- Thence,S. $89^{\circ}49'$ W.on true line betsecs.23 and 26.
- Over broken W.side of Alkali Canon.Through dense cedar & pinon,ascending from sec.cor.
- 12.50 E.edge of mesa,at top of perpendicular sandstone ledge 40 ft.high,225 ft.above the sec.cor.Ledges bear N.and SW.facing E.Thence over broken mesa.
- 24.00 A small spring,brs.S.of this point about 8.00 chs.drains SE a few rods,water sinking into earth.
- 39.89 $\frac{1}{2}$ Set an iron post 3 ft long,1 in.in diam.,24 ins.in the ground,for the $\frac{1}{4}$ sec.cor.with brass cap marked
- $\frac{1}{4}$
S 23
S 26
1912
- from which a cedar,8 ins.in diam.,brs.S 8° W.I40 lks.dist. marked, $\frac{1}{4}$ S 26 B T
- A cedar,7 ins.in diam.,brs.N. 44° W.II0 lks.dist. marked, $\frac{1}{4}$ S 23 B T
- 64.50 Wash,20 lks.wide,cse.SE.
- 75.25 Wash,10 lks.wide.cse.SE.
- 79.79 The corner of secs.22,23,26 and 27.
- Land broken.
- Soil,sandy loam and poor broken stony surface.
- Timber,scrub cedar and pinon.dense to scattering.
- Some good grazing.
- A large spring of good water was found after the survey in this part of the township was completed.It is about 20.00 chs.nearly SE.of the corner of secs.22,23,26 & 27. and is known as Rustler Spring.

July 6th,1912.

Subdivision of T.37 S.R.23 E.

Chains.

July 9: At 3:p.m.l.m.t. I set off $37^{\circ}35'$ on the lat.arc
and $22^{\circ}20'30''$ N. on the dec.arc, and determine a meridian,
at the corner of secs. 22, 23, 26 and 27.
Thence N. $0^{\circ}01'W.$ bet. secs. 22 and 23.

Over broken mesa, through dense cedar and pinon, gradually
descending.

3.00 Wash, dry, 10 lks. wide, cse. SE.

10.00 Enter short sage brush, brs. E&W.

40.00 Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the
ground for the $\frac{1}{4}$ sec.cor. with brass cap marked

$\frac{1}{4}$	S 22	|	S 23
---------------	------	--	------

1912

from which, a cedar, 14 ins. in diam., brs. S. $4^{\circ}E.$ 98 lks. dist
marked, $\frac{1}{4}$ S 23 B T

A cedar, 16 in. in diam. brs. S. $73^{\circ}30'W.$ 2.68 chs. dist.
marked, $\frac{1}{4}$ S 22 B T

47.00 Wash, 10 lks. wide, 3 ft. deep. cse. S $35^{\circ}E.$ grad. asc.

80.00 Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in the
ground, for the cor. of secs. I4, I5, 22 and 23 with a brass
cap marked

T 37	S	R 23, E
S 15	|	S 14
S 22	|	S 23

1912

from which, a cedar, 7 ins. in diam., brs. N. $69^{\circ}15'E.$ 154 lks.
marked, T 37 S R 23 E S 14 B T

A cedar, 16 ins. in diam., brs. S $66^{\circ}E.$ 200 lks. dist.
marked, T 37 S R 23 E S 23 B T

A cedar, 14 ins. in diam. brs. S. $25^{\circ}30'W.$ 125 lks. dist.
marked, T 37 S R 23 E S 22 B T

A cedar, 20 ins. in diam., brs. N. $1^{\circ}W.$ 366 lks. dist.
marked, T 37 S R 23 E S 15 B T

Land broken.

Soil, rocky and sandy. 2nd, to 4th, rate. Scant grazing.

Timber, scrub, cedar and pinon. Dense to scattered.

July 9 th, 1912.

Subdivision of T.37 S.R.23 E.

hains. July 10th, At 8h30m.a.m.l.m.t. I set off $37^{\circ}35'30''$ on the lat arc, and $22^{\circ}15'30''$ N. on the dec.arc, and determine a meridian with the solar, at the corner of secs. I4, I5, 22 and 23.
 Thence I run N. $89^{\circ}49'$ E. on random line bet. secs. I4 and 23.
 Set temp. $\frac{1}{2}$ sec.cor.
 Intersect the N&S.line, I5 lks. N. of the cor. of secs. I3, I4, 23 and 24.
 Thence, S. $89^{\circ}55'$ W. on true line bet. secs. I4 and 23.
 Gradual descent over sage, through cedar & pinon. scattered.
 Alkali Wash, 5 ft. deep, 20 lks. wide, dry. cse. S. 35° E.
 gradual ascent of western slope of canon.
 Leave short sage brush, N & S.
 Set an iron post 3 ft. long, 1 in. in diam. 24 ins. in mound of stone and earth, for the $\frac{1}{4}$ sec.cor. with a brass cap marked

$$\begin{array}{c} \frac{1}{4} \\ \hline S\ 14 \\ S\ 23 \\ \hline 1912 \end{array}$$

 from which, a cedar, 12 ins. in diam., brs. N. $41^{\circ}45'$ E. 4 lks. marked, $\frac{1}{2}$ S I4 B T
 A cedar, 10 ins. in diam., brs. S. $41^{\circ}30'$ W. 5 lks. dist. marked, $\frac{1}{4}$ S 23 B. T.
 W. rim of Alkali Canon. Top of perpendicular sandstone ledge. NW and SE. 30 ft. high. 100 ft. above the sec.cor.
 Enter short sagebrush. N&S.
 The corner of secs. I4, I5, 22 and 23.
 Land, broken.
 Soil, dark reddish sandy loam. and stony in parts.
 Timber, scrub cedar and pinon.
 Undergrowth, short sagebrush.
 Grazing, fair.

July 10th, 1912.

Subdivision of T.37 S.R.23 E.

Chains.

- July II: At 1h.30m.p.m.l.m.t. I set off $37^{\circ}35'30''$ on the lat.arc; $22^{\circ}05'30''$ N.on the dec.arc and determine a mer. with the solar at the corner of secs.I4;I5,22 and 23. Thence N. $0^{\circ}01'W.$ betsecs.I4 and I5.
- Gradually descending over rolling mesa surface, through dense cedar and pinon, and short sagebrush.
- 40.00 Set an iron post 3 ft.long, 1 in.in diam., 24 ins.in the ground, for the $\frac{1}{4}$ sec.cor.with brass cap marked
- | | | |
|---------------|------|------|
| $\frac{1}{4}$ | S I5 | S I4 |
|---------------|------|------|
- I9I2
- from which, A pinon, 15 in.in dia., brs.N. $77^{\circ}15'E.$ I76 lks. marked, $\frac{1}{4}$ S I4 B T
- A pinon, 5 ins.in diam, brs.N. $60^{\circ}30'W.$ 47 lks.dist. marked, $\frac{1}{4}$ S I5 B T.
- continue grad.desc.of NE.slope.
- 55.00 Desc.abruptly 100 ft.to
- 65.00 Canon gulch,dry,cse.SE.leave short sagebrush,E&W. Ascend about 100 ft.
- 80.00 Set an iron post 3 ft.long, 2 ins.in diam., 24 ins.in the ground, for the cor.of secs.I0,II,I4 and I5,with brass cap marked
- | | | |
|------|---|---------|
| T 37 | S | R 23, E |
| S I0 | | S II |
| S I5 | | S I4 |
- I9I2
- from which, a pinon, 8 ins.in diam. brs.N. $60^{\circ}E.$ 58 lks.dist. marked, T 37 S R 23 E S II B T
- A pinon, 8 ins.in diam., brs.S. $27^{\circ}15E.$ 70 lks.dist. marked, T 37 S R 23 E S I4 B T
- A pinon, 10 ins.in diam., brs.S. $7^{\circ}30'W.$ 32 lks.dist. marked, T 37 S R 23 E S I5 B T
- A pinon, 12 ins.in diam, brs.N. $30^{\circ}W.$ 35 lks.dist. marked, T 37 S R 23 E S I0 B T
- Land, rolling.
- Soil, dark reddish sandy loam, 1st, rate if irrigated.
- Timber, dense cedar and pinon,
- Undergrowth, sagebrush. July IIth.I9I2.

Subdivision of T.37 S.R.23 E.

Chains.

- July 12: At 9h. 15m. a.m.: l.m.t. I set off $37^{\circ}36'30''$ on the lat. arc; and $21^{\circ}59'N.$ on the dec. arc, and determine a meridian with the solar, at the cor. of secs. I0, II, I4 & I5. Thence I run N. $89^{\circ}55'E.$ on random line bet. secs. II and I4.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.77 Intersect the N & S. line, I2 lks. S. of the cor. of secs. II, I2, I3 and I4. Thence S. $89^{\circ}50'W.$ on true line bet. secs. II and I4. Over broken surface, draining SE. into Alkali Canon. Through dense cedar and pinon timber.
- 5.00 W. edge of mesa, on rim rock, bearing NE & SW. descend. 40 ft. perpendicular ledge, thence steep desc. over broken surface huge sandstone boulders and washes. 275 ft.
- 27.50 Canon Gulch, dry, cse. SW. asc.
- 39.88 Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in earth and stone on bed rock, for the $\frac{1}{4}$ sec. cor. with brass cap marked,
- $\frac{1}{4}$
 S III
 S I4
 1912
- from which, A cedar, 6 ins. in diam., brs, N. $81^{\circ}E$ 19 lks. dist. marked, $\frac{1}{4}$ S II B T
- A cedar, 6 ins. in diam, bears South 60 lks. dist. marked, $\frac{1}{4}$ S I4 B T
- 45.00 Base of descent, brs. N & S, thence across canon bottom.
- 48.50 Alkali Canon wash. 35 lks. wide, 20 ft. deep. dry. cse. S. $20^{\circ}E.$ A small spring, good water about 20 chs. N. in the wash.
- 51.50 Begin steep asc. of W side of canon.
- 71.50 E. edge of mesa, brs N&S. About 10 chs. There two cliff dwellings, in fair state of preservation.
- 79.77 The corner of secs. I0, II, I4 and I5.
Land broken.
Soil, poor, stony 4th, rate.
Timber, cedar and pinon pine. July 12th, 1912.

Subdivision of T.37 S.R.23 E.

Chains.

July 20th, At 8:a.m.l.m.t.I set off $37^{\circ}36'30''$ On the lat arc, and $20^{\circ}41'N$.on the dec.arc and determined a meridian with the solar, at the cor.of secs. IO, II, I4 and I5. Thence, N. $0^{\circ}01'N$.betsecs.I0 and II. Over broken surface, through dense cedar and pinon. Gradually descending.

24.00 Desc.becomes steep.

33.50 Gulch,dry,cse,E.175 ft.below last point.

40.00 Set an iron post 3 ft.long, 1 in.in diam.,24 ins.in earth and stone on bed rock,for the $\frac{1}{2}$ sec.cor.with brass cap marked,

T S IO | S II

1912

from which,a pinon,8 ins.in diam.brs.N. $39^{\circ}30'E$.81 lks.

marked,T S II B T

A pinon 9 ins.in diam.brs,S. $63^{\circ}W.77'$ lks.dist.

marked,T S IO B T

75.00 Grad.desc.

80.00 Set an iron post 3 ft.long,2 ims.in dia,24 ins.in the ground,for the cor.of secs.2,3,I0, and II.with a brass cap marked,

T.37	S	R 23	E
S 3		S 2	
S IO		S II	

 1912
from which,a cedar,10 in.in diam.,brs.N. $38^{\circ}30'E$.12 lks.

marked,T 37 S R 23 E S 2 B T

A cedar 8 in.in diam.,brs.S. $40^{\circ}15'E$.24 lks.dist.

marked,T 37 S R 23 E S II B T

A cedar,14 in.in diam.,brs.S. $69^{\circ}30'W$.107 lks.dist.

marked,T 37 S R 23 E S IO B T

A pinon,14 ins.in diam.,brs.N. $43^{\circ}30'W$.95 lks.dist.

marked,T 37 S R 23 E S 3 B T

Land broken.

Soil,sandy loam,2nd,to 4th,rate.some stony.

Timber,cedar and pinon.Fair grazing.

July 20th,1912.

Subdivision of T.37 S.R.23 E.

Chains. July 18: Impracticable to take lat. observation, today, on account of party crossing Alkali Canyon during the noon hours; not on line, therefore no meridian to test on. At 1.30:p.m.l.m.t. I set off $37^{\circ}37'$ on the lat.arc and $21^{\circ}00'$ N.on the dec.arc, and determine a meridian with the solar, at the cor.of secs.2,3,10 and II.

Thence I run
N. $89^{\circ}50'$ E.on random line betsecs.2 and II.

Set temp. $\frac{1}{4}$ sec.cor.

Intersect the N & S.line, at the corner of secs.I,2,II and I2.

Thence S. $89^{\circ}50'$ W.on true line,betsecs.2 and II.

Over broken land,draining W.into Alkali Canon.Gradual descent through dense cedar and pinon,& short sage brush.

Edge of mesa, and over perpendicular sandstone ledge 75 ft.high,into broken E.side of Alkali Canon.

Set an iron post 3 ft.long, 1 in.in diam.24 ins.in earth and stone, on bed rock, for the $\frac{1}{4}$ sec.cor.with brass cap marked

$\frac{1}{4}$
S 2
S C I E
1912

from which,a cedar,4 ins.in diam.brs.N. 40° W.15 lks.dist. marked, $\frac{1}{4}$ S 2 B T

A granite boulder,4 X 5 X 4 ft.with a X cut facing the corner,brg.S. 45° E.25 lks.dist.B 0 cut near cross.

Thence across canon bottom.

Alkali Wash,1.60 ch.wide,20 ft.deep,dry,cse.S.

Wash,dry,30 lks.wide,20 ft.deep,cse.SE.

Begin steep ascent of W.side of Alkali Canon.over very broken surface.

E.edge of mesa,at top of ascent.Rim rock,brs.N&S.

The corner of secs.2,3,10 and II.

Land broken, and rolling.

Soil,stony and barren on canon sides,Sandy sagebrush surface in canon.poor,2nd,to 4th,rate.

Timber,cedar & pinon. July, 18th, 1912.

Subdivision of T.37 S.R.23 E.

Chains.	July 20: At 10.30:a.m.l.m.t. I set off $37^{\circ}37'$ on the lat. arc and $20^{\circ}38\frac{1}{2}'$ N. on the dec. arc, and determine a meridian at the corner of secs. 2, 3, 10 and 11. Thence, N. $0^{\circ}01'$ W. on random line bet. secs. 2 & 3.
40.00	Set temp. $\frac{1}{4}$ sec.cor.
79.60	Intersect the N.bdy. of the township, 12 lks.E. of the cor. of secs. 2, 3, 34 and 35, heretofore described. Thence, S. $0^{\circ}06'$ E. on true line bet. secs. 2 and 3. Over broken land, through dense cedar & pinon. Grad. desc.
20.00	Desc. becomes steep.
21.50	Gulch, dry, 75 ft. below last point, cse. SE. A spring of clear water, small flow, brs. NW. about 5.00 chs. drains SE. Asc. abruptly about 60 ft.
24.50	Asc. becomes gradual.
39.60	Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec.cor. with brass cap marked $\frac{1}{4} S 3 | S 2$ I912 from which, a cedar, 10 in. in diam, brs. N. 64° E. 32 lks. dist. marked, $\frac{1}{4} S 2 B T$ A cedar, 12 in. in diam., brs. N. 82° W. 31 lks. marked, $\frac{1}{4} S 3 B T$
79.60	The corner of secs. 2, 3, 10 and 11. Land, broken. Soil, stony, poor 2nd, to 4th rate. sandy & stony. Timber, scrub cedar and pinon. Some fair grazing in patches.

July 20th, 1912.

Subdivision of T.37 S.R.23 E.

Chains

July 3: At 2;15; p.m.l.m.t. I set off $37^{\circ}33'$ on the lat.arc and $22^{\circ}57'30''$ N.on the dec.arc, and determine a meridian at the corner of secs.3,4,33 and 34 on the S bdy of the township, heretofore described.

Thence N. $0^{\circ}02'$ W. betsecs.33 and 34.

Over rolling broken land, stony surface, draining W. through short sage brush. ascending from canon.

7.00 Enter cedar and pinon, E & W.

40.00 Set an iron post 3 ft.long, 1 in.in diam., 24 ins.in md.of earth and stone on bed rock, for the $\frac{1}{4}$ sec.cor.with brass cap marked.

$\frac{1}{4}$	S 33	S 34
---------------	------	------

I9I2

from which a pinon, 10 in.in diam., brs.S. 10° E. 28 lks.dist. marked, $\frac{1}{4}$ S 34. B T

A pinon 8 ins.in diam., brs.N. 88° W. 34 lks.dist.

marked, $\frac{1}{4}$ S 33 B T

desc.abruptly from the $\frac{1}{4}$ cor.

3.00 Canon Gulch,dry,cse.SW.I75 ft.below $\frac{1}{4}$ sec.cor.

4.00 On top of N.edge of canon side.over rolling surface, gradual descent.Timber becomes scattering.

0.00 Set an iron post 3 ft.long, 2 ins.in diam., 24 ins. in earth and stone, for the cor.of secs.27,28,33 and 34. with brass cap marked

T 37	S	R 23	E
S 28	S 27		
S 33	S 34		

I9I2

raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high W.of the cor.

No trees in limits fit for marking for B Ts.

Land, rolling, and broken.

Soil, sandy loam and rocky canon sides.

Grazing, scant to fair.

Timber, cedar and pinon pine.

Undergrowth, sagebrush.

Subdivision of T.37 S.R.23 E.

Chains.	Thence N.89°48' E.on random line bet.secs.27 and 34.
40.00	Set. temp. $\frac{1}{4}$ sec.cor..
80.30	Intersect the N & S.line, 2 lks.S.of the cor.of secs. 26,27,34 and 35.
	Thence, S.89°47' W.on true line bet.secs.27 and 34.
	Over broken mesa surface, through thick dense and scat. cedar and pinon.
3.00	Enter short sagebrush,N & S.scat.cedar & pinon.
15.00	Leave scat.timber.N&S.
37.50	Enter cedar and pinon timber.N&S.
40.15	Set an iron post 3 ft.long, 1 in.in diam., 24 ins.in the ground, for the $\frac{1}{4}$ sec.cor.with a brass cap,marked
	$\frac{1}{4}$ S 27 S 34 1912
	from which, a cedar, 18 ins.in diam.brs.S.45°45' W.53 lks. marked, $\frac{1}{4}$ S 34 B T
	A cedar, 10 ins.in diam.,brs.N.11°E 53 lks.dist. marked, $\frac{1}{4}$ S 27 B T
55.00	Swail ,head of gulch,drains S.
71.00	Ruins of a prehistoric mesa dwelling.on line.and brs. one chain south.
78.00	Descend into canon.
80.30	The corner of secs.27,28,33 and 34 Land,rolling and broken. Soil,stony, and sandy loam.2nd.to poor 4th,rate. Timber,cedar and pinon,57.50 chs. Short sagebrush undergrowth,77.00 chs. Grazing;scant to fair.

July 3rd, 1912.

Subdivision of T.37 S.R.23 E.

Chains. July, 9: At 8h 35m.a.m.l.m.t. I set off $37^{\circ}34'$ on the lat. arc, $22^{\circ}22'30''$ N.on the dec.arc, and determine a meridian with the solar, at the corner of secs. 27, 28, 33 and 34. Thence, N. $0^{\circ}02'$ W.betsecs. 27 and 28.

Over broken surface, through dense cedar and pinon.

4.50 Draw, dry, cse. SW. asc. abruptly, 60 ft.

9.00 Grad. asc. over mesa. Through short sagebrush.

21.50 Remains of an old mesa ruin on line.

40.00 Leave dense cedar and pinon, E & W.

Set an iron post 3 ft. long, 1 in. in diam. 24 ins. in the ground, for the $\frac{1}{4}$ sec.cor. with brass cap marked

$\frac{1}{4}$ S 28 | S 27

I9I2

from which, a cedar, 12 ins. in diam., brs. S. $39^{\circ}30'$ E. 157 lks.

marked, $\frac{1}{4}$ S 27 B T

A cedar, 8 ins. in diam., brs. S. 11° W. 62 lks. dist.

marked, $\frac{1}{4}$ S 28 B T

Leave dense timber, continue grad. asc.

0.00 Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for the corner of secs. 21, 22, 27 and 28. with a brass cap marked

T 37 S	R 23 E
S 21	S 22
S 28	S 27

I9I2

dig pits 18 X 18 X 12 ins. in each sec. $5\frac{1}{2}$ ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high W.of the cor. from which, a cedar, 14 ins. in diam. brs. S. 71° E. 112 lks. dist. marked, T 37 S R 23 E S 27-B T

A cedar, 16 ins. in diam., brs. N. 42° W. 54 lks. dist.

marked, T 37 S R 23 E S 21 B T

No trees in secs. 27 and 28 suitable for bearing trees, within limits.

Land, broken.

Soil, dark reddish sandy loam. Stony in places. 2nd, to 4th, rate.

Timber, scrub cedar and pinon.

Subdivision of T.37 S.R.23 E.

Chains.

Thence I run.

N.89°49' E.on random line bet.secs.22 and 27.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

80.30 Intersect the N. & S.line, 17 lks.S.of the cor.of secs. 22,23,26 and 27.

Thence, S.89°42' W.on true line bet.secs.22 and 27.

Over rolling mesa, through scat.scrub cedar and pinon.
and dense short sagebrush.

Gradually ascending.

15.00 Ruins of a group of prehistoric mesa dwellings on line
and bearing about 5 acres in extent, bearing in about a
south west direction.Gradual descent.40.15 Set an iron post 3 ft.long, 1 in.in diam., 24 ins.in the
ground,for the $\frac{1}{4}$ sec.cor.with brass cap marked
$$\begin{array}{r} \frac{1}{4} \\ S\ 22 \\ \hline S\ 27 \\ 1912 \end{array}$$
from which,a cedar,10 ins.in diam.brs,N.30°W.200 lks.dist
marked $\frac{1}{4}$ S 22 B T

No other trees in limits fit for marking for B.Ts.

raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft.high N.of cor.

70.00 Begin gradual ascent.

80.30 The corner of secs.21,22,27 and 28.

Land rolling mesa.

Soil,Sandy loam, and stony.1st,to 4th rate.

Timber,scrub cedar and pinon,generally scattered.

Short sagebrush,fair grazing in patches.

At this corner,at apparent noon,I set off 22°21' 30"N.
on the dec.arc, and observe the sun on the meridian.

The observed Lat.reading is 37°35',which is correct.

July 9th,1912.

Subdivision of T.37 S.R.23 E.

Chains.

July 11th, At 8h.a.m.l.m.t. I set off $37^{\circ}35'$ on the lat. arc, and $22^{\circ}08'N$.on the dec.arc and determine a meridian with the solar, at the corner of secs.21,22,27 and 28. Thence N. $0^{\circ}02'W$.bet.secs.21 and 22.

Over rolling mesa, gradual ascent through scat.cedars and dense short sagebrush.

40.00 Set an iron post 3 ft.long, 1 in.in diam.24 ins.in the ground, for the $\frac{1}{4}$ sec.cor.with brass cap marked

$\frac{1}{4}$ S 21 | S 22

I9I2

from which a cedar,4 ins.in dia.,brs.N. $26^{\circ}E$.8 lks.dist. marked, $\frac{1}{4}$ S 22 B T

A cedar,12 ins.in diam.,brs.S. $10^{\circ}45'W$.264 lks.dist. marked, $\frac{1}{4}$ S 21 B T

Continue grad.asc.

80.00 Set an iron post 3 ft.long,2 ins.in diam.,24 ins.in the ground,for the cor.of secs.15,16,21 and 22. with a brass cap marked

T 37 S	R 23 E
S 16	S 15
S 21	S 22

I9I2

from which,a cedar,14 ins.in diam.,brs.S. $79^{\circ}45'E$.289 lks. marked,T 37 S R 23 E S 22 B T

A cedar,12 ins.in diam.,brs.S. $0^{\circ}45'W$.397 lks.dist.

marked,T 37 S R 23 E S 21 B T

No other trees in limits suitable for marking for B.Ts. dig pits,18 X 18 X 12 ins in each sec, $5\frac{1}{2}$ ft.dist.raise a mound of earth,4 ft.base,2 ft.high,W.of the cor.

Soil,sandy mesa loam.1st,rate if irrigated.

Land rolling.

Timber,scat.scrub cedar and some pinon.

Short sagebrush undergrowth.

Fair grazing in patches.

Subdivision of T.37 S.R.23 E.

Chains.

Thence I run

N.89°42' E.on random line,bet.secs.I5 and 22.

40.00

Set temp. $\frac{1}{4}$ sec.cor.

80.33

Intersect the N & S.line,I2 lks.N.of the cor.of secs.

I4,I5,22 and 23.

July 11:

At this cor.at apparent noon, I set off 22°06' N.on the dec.arc, and observe the sun on the meridian. The reading of the lat.arc thus obtained, is 37°35'30", which is sufficiently correct, and shows the instrumental lat. satisfactorily accurate.

Thence, S.89°47' W.on true line,bet.secs.I5 and 22.

Over rolling mesa.through dense cedar and pinon.

Gradually descending.

20.00 Leave dense cedar and pinon, over open sagebrush mesa.

40.I6 $\frac{1}{2}$ Set an iron post 3 ft.long, 1 in.in diam.,24 ins.in the ground,for the $\frac{1}{4}$ sec.cor.with brass cap marked
$$\begin{array}{c} \frac{1}{4} \\ \text{S } 15 \\ \hline \text{S } 22 \\ \text{1912} \end{array}$$

from which,a cedar,8 ins.,in diam.brs.N.40°W.250 lks.dist. marked, $\frac{1}{4}$ S 15 B T

A cedar,4 ins.in diam.,brs.S.10°E.390 lks.dist.

marked, $\frac{1}{4}$ S 22 B T

80.33 The corner of secs.I5,I6,21 and 22.

Land,rolling.

Soil,sandy loam.Ist.rate if irrigated.

Timber,dense cedar and pinon 20.00 chs.

Undergrowth,short sagebrush,60.00 chs.

Grazing,fair in sagebrush mesa.

July,11th,1912.

Subdivision of T.37 S.R.23 E.

Chains.

July 13: At 3h.p.m.l.m.t. I set off $37^{\circ}35'30''$ on the lat.arc and $21^{\circ}48'N.$ on the dec.arc and determined a meridian with the solar at the corner of secs. I5, I6, 2I and 22. Thence $N.0^{\circ}02'W.$ bet. secs. I5 and I6. Over rolling mesa surface, draining SW. through scat. cedar and pinon, and dense short sagebrush.

40.00

Set an iron post 3 ft. long, 1 ins. in diam. 24 ins., in the ground, for the $\frac{1}{4}$ sec.cor. with brass cap marked,

$\frac{1}{4}$	S I6	S I5
	I912	

from which, a cedar, 20 ins. in diam., brs. N. $19^{\circ}30'E.$ 360 lks. marked, $\frac{1}{4}$ S I5 B T

A cedar, I2 ins. in diam. brs. N. $49^{\circ}W.$ 240 lks. dist. marked, $\frac{1}{4}$ S I6 B T

80.00

Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground, for the cor. of secs. 9, I0, I5 and I6, with brass cap, marked

T 37	S	R 23	E
S	9	S	I0
S	I6	S	I5
I912			

from which, a cedar, I2 ins. in diam., brs. N. $77^{\circ}E.$ 278 lks. marked, T 37 S R 23 E S I0 B T

A cedar, I2 ins. in diam., brs. S. $23^{\circ}30'E.$ 116 lks. dist. marked, T 37 S R 23 E S I5 B T

A cedar, II ins. in diam., brs. S $33^{\circ}30'W.$ 102 lks. dist. marked, T 37 S R 23 E S I6 B T

A cedar, 9 ins. in diam., brs. N. $58^{\circ}30'W.$ 136 lks. dist. marked, T 37 S R 23 E S 9 B T

Land, rolling.

Soil, sandy mesa loam. Ist, rate if irrigated.

Timber, cedar, and pinon, scattered.

Undergrowth, short sagebrush.

Grazing, good in patches.

July, 13th. I912.

Subdivision of T.37 S.R 23 E.

Chains.	July II. At 3h.10.p.m.l.m.t. I set off $37^{\circ}36'30''$ on the lat.arc; $22^{\circ}05'N.$ on the dec.arc, and determine a meridian at the corner of secs. 9, 10, 15 and 16. Thence I run N. $89^{\circ}47'E.$ on random line, bet.secs. 10 and 15.
40.00	Set temp. $\frac{1}{4}$ sec.cor.
80.30	Intersect the N & S.line, 5 lks.N.of the cor.of secs. 10, 11, 14 and 15. Thence, S. $89^{\circ}49'W.$ on true line, bet.secs. 10 and 15. Ascending through dense cedar and pinon.
4.50	Top of ascent.N.& S.grad.desc.
17.60	Gulch,dry,cse.SE. An old Cliff dwelling,in fair state of preservation,bears.N.about 10.00 chs.Asc.
40.15	Set an iron post 3 ft.long, 1 in.in diam., 24 ins.in the ground,for the $\frac{1}{4}$ sec.cor.with brass cap marked $\begin{array}{c} \frac{1}{4} \\ \text{S } 10 \\ \hline \text{S } 15 \\ 1912 \end{array}$ from which,a pinon, 16 ins.in diam., brs.N. $31^{\circ}E.$ 21 lks. marked, $\frac{1}{4}$ S 10 B T A cedar, 8 ins.in diam., brs.S. $10^{\circ}E.$ 31 lks.dist. marked, $\frac{1}{4}$ S 15 B T Continue grad.asc.from $\frac{1}{4}$ cor.
55.00	Leave dense cedar and pinon.Enter short sagebrush,brs. N.& S.Grad.desc.
80.30	The corner of secs. 9, 10, 15 and 16. Land,broken and rolling. Soil,Sandy bench loam and stony wash.Ist.to 4th,rate. Timber,cedar and pinon.55.00 chs. Open sagebrush,25.00 chs. Fair grazing in sage brush mesa.

July IIth, 1912.

Subdivision of T.37 S.R.23 E.

Chains.	July 15: At 8h.a.m.l.m.t. I set off $37^{\circ}36'30''$ on the lat.arc and $21^{\circ}33'30''N.$ on the dec.arc and determine a meridian, at the corner of secs.9, 10 15 and 16. Thence N. $0^{\circ}02'W.$ bet. secs. 9 and 10. Over rolling mesa. Descending gradually over open sagebrush. An occasional scrub cedar or pinon. Surface drains. S.W.						
40.00	Set an iron post 3 ft. long, 1 in. in diam. 24 ins. in the ground, for the $\frac{1}{4}$ sec.cor. with brass cap, marked $\frac{1}{4} S 9 S 10$ I912 from which, a cedar, 8 ins. in diam., brs. N. $26^{\circ}30' E.$ 332 lks. marked, $\frac{1}{4} S 10 B T$ A cedar, 10 ins. in diam., brs. N. $60^{\circ}45' W.$ 48 lks. dist. marked, $\frac{1}{4} S 9 B T$						
52.75	Wash, dry, 15 lks. wide, 5 ft. deep, cse. SW. Grad. asc.						
80.00	Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground, for the cor. of secs. 3, 4, 9 and 10, with brass cap marked <table style="margin-left: auto; margin-right: auto;"><tr><td>T 37 S</td><td>R 23 E</td></tr><tr><td>S 4</td><td>S 3</td></tr><tr><td>S 9</td><td>S 10</td></tr></table> I912 dig pits, 18 X 18 X 12 ins in each sec. $5\frac{1}{2}$ ft. dist. raise a mound of earth, 4 ft. base, 2 ft. high W. of the cor. Land, rolling. Soil, sandy mesa loam. Ist, rate if irrigated. An occasional cedar or pinon. scrubby. Undergrowth short sagebrush, Good grazing.	T 37 S	R 23 E	S 4	S 3	S 9	S 10
T 37 S	R 23 E						
S 4	S 3						
S 9	S 10						

Subdivision of T.37 S.R.23 E.

Chains.	
	Thence I run N.89°49'E.on random line bet.secs.3 and 10.
40.00	Set temp. $\frac{1}{4}$ sec.cor.
80.44	Intersect the N. & S.line, 4 lksN.of the cor.of secs:2,3, 10 and II. Thence, S, 89°51'W.on true line bet.secs.3 and 10. Over rolling mesa, through dense cedar and pinon.Grad.asc. Grad.desc.
5.00	
40.22	Set an iron post 3 ft.long, 1 in.in diam., 24 ins.in the ground, for the $\frac{1}{4}$ sec.cor.with a brass cap marked $\begin{array}{c} \frac{1}{4} \\ \text{S } 3 \\ \hline \text{S } 10 \\ 1912 \end{array}$ from which, a cedar, 30 ins.in diam.brs, N.16°E.49 lks.dist. marked, $\frac{1}{4}$ S 3 B T A cedar, 20 ins.in diam., brs.S.72°30'E.50 lks.dist. marked, $\frac{1}{4}$ S 10 B T
40.50	Wash, 5 lks.wide,dry,cse.S.4 ft.deep.Leave cedar and pinon.Enter short sage brush.N & S.Grad.asc.
64.00	Wash, 10 lks.wide,cse.S 35°W.
80.44	The cor.of secs.3,4,9 and 10. Land,rolling. Soil,sandy bench loam,good Ist,rate if irrigated. Timber,scrub cedar and pinon,40.50 chs. Open sagebrush mesa.about 40.00 chs. Good grazing. July 15: At this cor.at apparent noon,I set off 21°31'N.on the lat.arc.and observe the sun on the meridian.The reading of the lat.arc was found to be 37°37' which is approximately correct.

Subdivision of T.37 S.R.23 E.

Chains.

N.0°02'W.on random line bet.secs.3 and 4.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

79.60 Intersect the N.bdy.of the township,10,lks.E.of the cor. of secs.3,4,33 and 34 heretofore described. Thence

S.0°6'E.on true line bet.secs. 3 and 4.

Over rolling mesa, short sagebrush, with an occasional scrub cedar or pinon.

Gradual ascent.

39.60 Set an iron post 3 ft.long, 1 in.in diam. 24 ins,in the ground,for the $\frac{1}{4}$.sec.cor.with brass cap marked $\frac{1}{4}$.S 4 | S 3

I9I2

dig pits,18 X 18 X 12 ins.N.& S.of post 3 ft.dist.and raise a mound of earth, $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft.high W.of the corner.

79.60 The corner of secs.3,4,9 and 10.

Land rolling.

Soil,sandy bench loam.1st,rate if irrigated.

Very little scattered timber,cedar and pinon.

Short sagebrush,

Good grazing..

July 15th, I9I2.

Subdivision of T.37 S.R.23 E.

Chains.	July 8th, at 10h.a.m.l.m.t. I set off $37^{\circ}33'$ on the lat. arc, and $22^{\circ}29'$ N.on the dec.arc and determine a meridian with the solar, at the corner of secs.4,5,32 and 33, on S.bdy.of Township, heretofore described. N. $0^{\circ}03'$ W.betsecs.32 and 33. Over broken land, through scat. scrub cedar and pinon, gradual ascent of SE slope of high ridge. Begin steep ascent, of S.slope, broken surface. Mesa point, projects SW.desc.steep N. side of ridge. Set an iron post 3 ft.long, 1 in.in diam, 24 ins.in earth and stone, for the $\frac{1}{4}$ sec.cor.with brass cap marked,
20.00	
26.00	
40.00	
	$\frac{1}{4}$ S 32 | S 33 I9I2
	from which,A cedar,7 ins.in diam.brs.N. 77° E.47 lks.dist. marked, $\frac{1}{4}$ S 33 B T
	A cedar,16 ins.in diam.,brs.S. 66° W.86 lks.dist. marked, $\frac{1}{4}$ S 32 B T
	descent becomes gradual from $\frac{1}{2}$ cor..
41.50	Draw,dry,cse.SW.grad.asc.
76.00	Leave cedar & pinon.E&W.
80.00	Set an iron post 3 ft.long, 2 ins.in diam.,24 ins.in the ground,for the corner of secs.28,29,32 and 33 with a brass cap marked
	T. 37 S | R 23 E. S 29 | S 28 --- | --- S 32 | S 33 I9I2
	dig pits 18 X 18 X 12 ins.in each sec. $5\frac{1}{4}$ ft.dist.and raise a mound of earth 4 ft.base,2 ft.high W.of the corner.
	No suitable bearing trees in limits.
	Land,broken and rolling.
	Soil,sandy bench loam, and stony wash,hillsides.1st,to 4th,rate.
	Timber,scrub cedar and pinon.Fair grazing in patches.

Subdivision of T.37 S.R 23 E.

- hains. Thence I run
N. $89^{\circ}48'$ E.on random line betsecs.28 and 33.
- 0.00 Set temp. $\frac{1}{4}$ sec.cor.
- ✓ 9.77 Intersect the N & S.line,8 lks!S.of the cor.of secs. 27,28,33 and 34.
- Thence,S. $89^{\circ}45'$ W.on true line betsecs.28 and 33.
- Over broken mesa,draining SW.through dense scrub cedar and pinon.Grad.asc.
- 5.00 Draw,dry,cse.SW.asc.
- 3.00 Mesa point,projects S.W.steep desc.
- 5.00 Desc.gradually,along N.side of guich.
- 9.88 Set an iron post 3 ft.long,I in.in diam.,24 ins.in the ground,for the $\frac{1}{4}$ sec.cor.with brass cap marked
- $\frac{1}{4}$
S 28
S 33
1912
- from which,a cedar,8 ins.in diam.brs.S. 32° E 53 lks.dist. marked, $\frac{1}{4}$ S 33 B T
- A cedar,12 ins.in diam.brs.N. 4° W32 lks.dist. marked, $\frac{1}{4}$ S 28 B T over rolling surface in canon.
- 5.50 Canon wash,dry,20 lks.wide.5 ft.deep cse.SE.
- 1.00 Begin abrupt ascent.
- 7.00 Top of ascent,about 140 ft.above last point,bearing N & S.thence over rolling mesa.
- 10.00 Leave dense timber and enter short sage brush.brs.N & S.
- ✓ 9.77 The corner of secs.28,29,32 and 33.
- Land,broken and rolling.
- Soil.sandy bench loam and stony wash surface.2nd.rate to poor 4th,rate.
- Timber,scrub cedar and pinon,about 60.00 chs.
- Open sage brush mesa,about 20.00 chs.
- Scant to fair grazing.

Subdivision of T.37 S.R.23 E.

Chains.

- July 8: At apparent noon, I set off $22^{\circ}28'30''$ N. on the dec. arc, and observe the sun on the meridian at the corner of secs. 28, 29, 32 and 33. The observed lat. reading at this time, is $37^{\circ}34'$ which is approximately correct. Thence, N. $0^{\circ}03'$ W. bet. secs. 28 and 29. Over rolling mesa, through scat. scrub cedar, and short sage brush, grad. asc.
- 10.00 Leave cedar, over short. sage brush.
- 40.00 Set an iron post 3 ft. long, 1 in. in diam. 24 ins. in the ground for the $\frac{1}{4}$ sec. cor. with brass cap marked
- | | |
|--------------------|------|
| $\frac{1}{4}$ S 29 | S 28 |
|--------------------|------|
- I9I2
- dig pits, 18 X 18 X 12 ins. N & S. of the post 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of the corner.
- Gradual descent from the cor.
- 80.00 Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for the corner of secs. 20, 21, 28 and 29. with a brass cap marked
- | | |
|-----------|-------------|
| T 37 S 20 | R 23 E S 21 |
| S 29 | S 28 |
- I9I2
- dig pits, 18 X 18 X 12 ins. in each sec. $5\frac{1}{2}$ ft. dist. and raise a mound of earth, 4 ft. base, 2 ft. high W. of the cor. Land, rolling.
- Soil, sandy bench loam. 1st rate if irrigated.
- Good grazing.
- Timber, cedar, about 10.00 chs.
- Undergrowth, short sage brush.

July 8th, 1912.

Subdivision of T. 37 S. R. 23 E.

Chains.

July 9th, At 1h30m.p.m.l.m.t. I set off $37^{\circ}35'$ on the lat. arc, and $22^{\circ}22'N$. on the dec. arc and determine a meridian with the solar, at the corner of secs. 20, 21, 28 and 29.

Thence N. $89^{\circ}45'W$. on random line bet. secs. 21 and 28.

40.00

Set temp. $\frac{1}{4}$ sec.cor.

79.70

Intersect the N. & S. line, 10 lks. N. of the cor. of secs. 21, 22, 27 and 28.

Thence, I run

S. $89^{\circ}49'W$. on true line bet. secs. 21 and 28.

Over rolling mesa, dense short sagebrush, gradual desc.

Scat. scrub cedar and pinon.

39.85

Leave scat. scrub cedar, set an iron post 3 ft. long, I in in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec.cor. with a brass cap marked

$\frac{1}{4}$
S 21
S 28

I9I2

Trees in distance too scrubby to mark for B.Ts.

dig pits, 18 X 18 X 12 ins. E and W. of post 3 ft. dist. and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of the cor. continue grad. desc.

79.70

The cor. of secs. 20, 21, 28 and 29.

Land, rolling.

Soil, sandy bench loam, 1st. rate if irrigated.

Timber, scrub cedar, very scattered.

Short sagebrush.

Grazing fair.

July, 9th, 1912.

Subdivision of T.37 S.R.23 E.

Chains.	July 8th, At 2h.10m.p.m.l.m.t. I set off $37^{\circ}35'$ on the lat.arc, and $22^{\circ}28'$ N.on the dec.arc and determine a meridian with the solar, at the cor.of secs.20,21,28 and 29. Thence, N. $0^{\circ}03'$ W.betsecs.20 and 21.
16.75	Over rolling mesa, through dense short sagebrush, grad.desc. Old stage road,bet.Bluff and Monticello,brs.N.E. and S.W.
40.00	Leave sagebrush mesa, enter dense cedar & pinon,E&W.Set an iron post 3 ft long, 1 in.in diam 24 ins,in the ground for the $\frac{1}{4}$ sec.cor.with brass cap marked
	$\frac{1}{4}$ S 20 | S 21
	1912
	from which,a cedar,14 ins.in diam.,brs.N. $68^{\circ}30'$ W.258 lks. marked, $\frac{1}{4}$ S 20 B T
	a cedar,5 ins.in diam.brs.S. $7^{\circ}15'$ E.180 lks.dist. marked $\frac{1}{4}$ S 21 B T
41.10	Old road from Bluff to Monticello,brs.N. 65° E. & S. 65° W.
76.00	Canon wash,20 lks.wide,dry,cse.S. 60° W.acs.75 ft.
80.00	Set an iron post 3 ft.long,2 ins.in diam.24 ins.in the ground,for the cor.of secs.16,17,20 and 21.with a brass cap marked.
	T 37 S R 23 E S 16 B T S 17 | S 16 S 20 | S 21
	1912
	from which,A pinon,5 in.in diam.brs.N. $62^{\circ}30'$ E.59 lks.dist. marked,T 37 S R 23 E S 16 B T
	A pinon,12 ins.in diam,brs.S. 40° E.153 lks.dist. marked,T 37 SR 23 E S 21 B T
	A pinon,7 ins.in diam.brs.S. 40° W.33 lks.dist. marked,T 37 S R 23 E S 20 B T
	A pinon,15 ins.in diam.brs.N. 9° W.31 lks.dist.mkd.
	T 37 S R 23 E S 17 B T
	Land,rolling and broken.
	Soil,rocky, and sandy mesa loam.
	Timber,cedar and pinon about 40.00 chs.
	Grazing,fair.short sagebrush.about 40.00 chs.
	July 8th,1912.

Subdivision of T.37 S.R.23 E.

Chains.	
	July 13: At 9h. 15 A.m.l.m.t. I set off $37^{\circ}35'30''$ on the lat.arc, and $21^{\circ}50'N.$ on the dec.arc, and determine a mer-with the solar, at the corner of secs. I6, I7, 20 and 21.
40.00	Thence N. $89^{\circ}49'E.$ on random line bet. secs. I6 and 21.
79.72	Set temp. $\frac{1}{4}$ sec.cor.
	Intersect the N. & S. line, 3 lks. N. of the cor. of secs. I5, I6, 21 and 22.
	Thence S. $89^{\circ}50'W.$ on true line bet. secs. I6 and 21.
	Over rolling mesa, short sagebrush, and an occasional cedar or pinon.
39.86	Set an iron post 3 ft. long, 1 in. in diam. 24 ins. in the ground, for the $\frac{1}{4}$ sec.cor. with brass cap, marked,
	$\frac{1}{4}$ S. I6 S 21 1912
	from which, a cedar, 14 in. in diam, brs. N. $25^{\circ}E.$ 198 lks. dist. marked, $\frac{1}{4}$ S I6 B.T. No other trees suitable for marking, in limits.
	dig pits 18 X 18 X 12 ins. E & W. of the post, 3 ft. dist. and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of the corner.
42.00	Old stage road between Bluff and Monticello. Now abandoned. bears N.E and S.W.
60.00	Enter dense cedar and pinon timber. N & S.
72.50	Head of gulch, cse. SW. asc.
79.72	The corner of secs. I6, I7, 20 and 21.
	Land, rolling and broken.
	Soil, sandy bench loam, and stony.
	Timber, cedar and pinon about 20.00 chs.
	Undergrowth, short sagebrush, about 60.00 chs.
	Grazing fair to good.
	July 13 th, 1912.

Subdivision of T.37 S .R.23 E.

Chains.

July 16: At 9h.30m.a.m.l.m.t. I set off $37^{\circ}35'30''$ on the lat.arc; $21^{\circ}22'30''$ N. on the dec.arc and determine a meridian at the corner of secs. I6, I7, 20 and 21.

Thence N. $0^{\circ}03'$ W. bet. secs. I6 and I7.

Through dense cedar and pinon. Over broken surface draining N.W. into canon. grad. asc.

40.00 Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{2}$ sec.cor. with brass cap marked

$\frac{1}{4}$	S I7	S I6
---------------	------	------

I9I2

from which a cedar, 18 ins. in diam., brs. N. 40° E. 75 lks.dist. marked, $\frac{1}{4}$ S I6 B T

A pinon, 8 ins. in diam., brs. S $71^{\circ}30'$ W. 75 lks.dist. marked, $\frac{1}{4}$ S I7 B T

42.75 Desc. abruptly, I60 ft.

54.00 Canon wash, dry, 30 lks. wide, cse. SW.

55.50 Same wash, cse. E.

57.25 Same wash, cse. SW. Asc. 200 ft. up N.side. of canon. over broken washed side.

70.00 Top of ascent to timbered mesa. rolling surface,

80.00 Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for the corner of secs. 8, 9, I6 and I7, with a brass cap marked

T 37	S R 23 E
S 8	S 9
S I7	S I6

I9I2

from which, a pinon 12 ins. in diam., brs. N. 38° E. 40 lks.dist. marked, T 37 S R 23 E S 9 B T

A cedar, 10 ins. in diam. brs. S 16° E. 56 lks.dist. marked, T 37 S R 23 E S I6 B T

A pinon, 10 in. in diam. brs. S 69° W. 43 lks.dist. marked, T 37 S.R. 23 E S I7 B T

A pinon, 13 ins. in diam., brs. N. 25° W. 58 lks.dist. marked, T 37 S R 23 E S 8 B T

Land, broken. Scant grazing. Scrub cedar and pinon.

Soil, rocky and sandy bench. 2nd, to poor 4th. rate.

July 16, 1912.

Subdivision of T.37 S.R.23 E.

- July 19; At 9h.45m. a.m.l.m.t. I set off $37^{\circ}36'30''$ on the lat.arc and $20^{\circ}51'N.$ on the dec.arc and determine a meridian, at the cor.of secs.8,9,I6 and I7.
- Thence I run N. $89^{\circ}50'E.$ on random line betsecs.9 and I6.
- Set temp. $\frac{1}{4}$ sec.cor.
- Intersect the N & S line at the corner of secs.9,I0,I5 and I6.
- Thence, S. $89^{\circ}50'W.$ on true line betsecs.9 and I6.
- Over broken land draining S.W. through dense cedar and pinon. grad.desc.
- Old stage road bet Bluff and Monticello. brs. N & S.
- Set an iron post 3 ft. long, 1 in. in diam. 24 ins. in the ground, for the $\frac{1}{4}$ sec.cor. with brass cap marked
- $\frac{1}{4}$
S 9
S I6
- I9I2
- from which, a cedar, 7 in. in diam., brs. N $45^{\circ}E.$ 5I lks.dist. mkd. $\frac{1}{4}$ S 9 B T
- A cedar, 8 in. in diam. brs. S. $54^{\circ}E.$ 104 lks.dist.
- marked, $\frac{1}{4}$ S.I6 B T
- Canon gulch, dry 75 ft. below $\frac{1}{4}$ cor.cse.SW. A spring with a small flow of water brs. I.00 ch.E. Two other large springs known as Mustang Springs, bear North, about 30.00 chs.
- Spur of mesa, projects S.desc. 100 ft.
- Canon wash, dry, 20 lks.wide, cse. S. $35^{\circ}W.$ asc.
- The cor.of secs.8,9,.I6 and I7.
- Land, broken.
- Soil, rocky and sandy bench loam.
- Timber, cedar and pinon.
- Undergrowth, sagebrush.
- Grazing, scant to fair.
- July 19, 1912.

Subdivision of T.37 S.R.23 E.

Chains.	July 16th, At 10h.30m.a.m.l.m.t. I set off $37^{\circ}36'30''$ on the lat.arc, and $21^{\circ}21'N.$ on the dec.arc and determine a meridian, at the corner of secs. 8, 9, 16 and 17. Thence $N.0^{\circ}03'W.$ bet. secs. 8 and 9. Over rolling mesa, through dense cedar and pinon and short sagebrush. Gradually descending.
40.00	Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec.cor. with brass cap, marked. $\begin{array}{c|c} \frac{1}{4} & S 8 \\ \hline S 9 & \end{array}$ 1912 from which, a cedar, 20 ins., in diam., brs. $S.75^{\circ}30'E.52$ lks marked, $\frac{1}{4} S 9 B T$ A cedar, 10 in. in diam brs. $N.75^{\frac{1}{2}}W.28$ lks. dist. marked, $\frac{1}{4} S 8 B T$
70.00	Leave dense cedar and pinon E&W.
80.00	Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground, for the cor. of secs. 4, 5, 8 and 9. with a brass cap marked. $\begin{array}{c|c} T & 37 \\ \hline S & R 23 \\ \hline S 5 & S 4 \\ \hline S 8 & S 9 \end{array}$ 1912 from which, a cedar, 12 ins. in diam., brs. $N.53^{\circ}30'E.45$ lks marked, $T 37 S R 23 E S 4 B T$ A cedar, 10 ins. in diam. brs. $S 48^{\circ}E.155$ lks. dist. marked. $T 37 S R 23 E S 9 B T$ A cedar, 12 ins. in diam., brs. $N.20^{\circ}15'W.25$ lks. dist. marked, $T 37 S R 23 E S 5 B T$ No tree in sec. 8 suitable for marking. dig pits 18 X 18 X 18 X 12 ins. in each sec. $5\frac{1}{2}$ ft. dist. and raise a mound of earth, 4 ft. base, 2 ft. high W. of cor. Land, rolling. Soil, sandy bench loam, and stony. Ist, to 4th, rate. Timber, cedar and pinon. 70.00 chs. Short sagebrush. Fair grazing.

Subdivision of T.37 S.R.23 E.

Chains. July 16th,

At apparent noon I set off $21^{\circ}21'N.$ on the dec.arc and observe the sun on the meridian, at the corner of secs. 4, 5, 8 and 9. The lat.reading thus secured is $37^{\circ}37'$ which shows the instrumental lat.to be correct.

Thence I run

N. $89^{\circ}50'E.$ on random line betsecs. 4 and 9.40.00 Set temp. $\frac{1}{4}$ sec.cor.

79.72 Intersect the N. & S.line 5 lks.S.of the cor.of secs.

3, 4, 9 and 10.

Thence, S. $89^{\circ}48'W.$ on true line betsecs. 4 and 9.

Over rolling mesa,draining SW.grad.desc.through short sage brush.

30.50 Old stage road,bet.Bluff and Monticello.brs.N & S.

35.00 Enter dense.cedar. and pinon.N&S. Scrubby growth.

39.86 Set an iron post, 3 ft.long, $1\frac{1}{2}$ in.in.diam., 24 ins.in the ground,for the $\frac{1}{4}$ sec.cor.with brass cap marked
$$\begin{array}{c} \frac{1}{4} \\ \text{S } 4 \\ \hline \text{S } 9 \\ \text{1912} \end{array}$$

No trees in limits suitable for marking.

raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high N.of the cor. continue gradual desc.from cor.

58.50 Wash,dry,15 lks.wide,cse.SE.grad.asc.

70.00 Grad.desc.

79.72 The cor.of secs. 4, 5, 8 and 9.

Land,rolling.

Soil,sandy bench loam.Ist.rate if irrigated.

Open sage brush,35.00 chs..

Cedar and pinon,about 44.73 chs.

Good grazing.

July 16th, 1912.

Daniel B. Miller

U.S. Surveyor.

Subdivision of T. 37 S., R. 23 E.

Chains.

Survey commenced July 12, 1912 and executed with a Young & Sons light mountain Transit No. 8477, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs. (Note: For adjustments of transit and solar apparatus, see book of exterior lines of this township.)

July 22: At 2h 06m, p. m., l. m. t., I set off $37^{\circ} 37' N.$ on the lat. arc, $20^{\circ} 15' 30'' N.$ on the decl. arc, and at the cor. of secs. 4, 5, 8 and 9, determine the meridian with the solar.

Thence I run $N. 0^{\circ} 03' W.$, on random line bet. secs. 4 and 5.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.57 Intersect the N. bdy. of the Twp., 31 lks. W. of the cor. of secs. 4, 5, 32 and 33, heretofore described.

Thence, S. $0^{\circ} 10' W.$, on true line bet. secs. 4 and 5. Over rolling mesa, covered with scattering cedar and pinon timber and sage brush undergrowth.

19.60 Dry draw, 20 lks. wide, 5 lks. deep, drains SW.

28.50 Dry draw, 20 lks. wide, 5 lks. deep, drains SW.

39.57 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	S 5	S 4
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1912

Dig pits, 18x18x12 ins. N. and S., of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

57.50 Dry draw, 20 lks. wide, 5 lks. deep, drains SW.

75.60 Dry draw, 30 lks. wide, 5 lks. deep, drains SW.

79.57 The cor. of secs. 4, 5, 8 and 9.
Land rolling.
Soil, sandy loam; 1 st rate.
Timber, scattering scrub cedar and pinon.

July 22, 1912.

Subdivision of T. 37 S., R. 23 E.

Chains.

July 12: At 8h05m, a. m., l. m. t., I set off $37^{\circ} 33' N.$,
on the lat. arc, $21^{\circ} 59' 30'' N.$ on the decl. arc, and
at the cor. of secs. 5, 6, 31 and 32, on Sbdy: of Tp.
heretofore described, determine a meridian with the solar.

Thence I run

N. $0^{\circ} 03'$ W., bet. secs. 31 and 32.Over rolling mesa, covered with scattering scrub cedar
timber and sage brush undergrowth.14.00 Start abrupt desc., over broken rocky slope of canon, bears
NE. and SW.

20.00 An alkali spring on line.

39.70 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the witness cor. to the $\frac{1}{4}$ sec. cor., with
brass cap mkd.

	WC
$\frac{1}{4}$	S 32
S 31	

1912

From which

A cedar, 18 ins. in diam., bears S. $58^{\circ} 30' E.$,
117 lks. dist., mkd. $\frac{1}{4}$ S32 WC BT.

A cedar, 20 ins. in diam., bears S. $18^{\circ} W.$,
185 lks. dist., mkd. $\frac{1}{4}$ S31 WC BT.

40.00 True point for cor. falls in a dry draw, 30 lks. wide,
Cor. not set,
10 lks. deep, drains SW.; asc. over broken rocky slope
of canon.56.00 Top of abrupt asc., bears NE. and SW., continue over
rolling mesa.80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in
the ground for the cor. of secs. 29, 30, 31 and 32,
with brass cap mkd.

T 37 S R 23 E	
S 30	S 29
<hr/>	
S 31	S 32

1912

From which

A cedar, 16 ins. in diam., bears N. $36^{\circ} E.$,

Subdivision of T. 37 S., R. 23 E.

Chains.

20 lks. dist., mkd. T37S R23E S29 BT.

A cedar, 12 ins. in diam., bears S. 27° E.,

47 lks. dist., mkd. T37S R23E S32 BT.

A cedar, 16 ins. in diam., bears S. 12° W.,

29 lks. dist., mkd. T37S R23E S31 BT.

A cedar, 10 ins. in diam., bears N. 62° W.,

55 lks. dist., mkd. T37S R23E S30 BT.

Land rolling and broken.

Soil, sandy loam on mesa; 1st rate.

Timber, scattering scrub cedar and pinon.

Undergrowth, sagebrush.

000-----

Thence I run

N. 89° 48' E., on random line bet. secs. 29 and 32.

40.00 Set temp. $\frac{1}{4}$ sec. cor.80.03 Intersect the N. and S. line, 9 lks. S. of the cor. of sec
28, 29, 32 and 33.July 12: At 12h 05m, p. m., l. m. t., I set off 21° 58' N.
on the decl. arc, and at the cor. of secs. 28, 29, 32
and 33, observe the sun on the meridian, the resulting
lat. is 37° 34' N.

Thence S. 89° 44' W., on tire line bet. secs. 29 and 32.

Over open sage brush mesa, covered with scattering scrub
cedar timber.

8.00 Enter dense cedar and pinon timber, bears SE. and SW.

20.00 Dry draw, 50 lks. wide, 10 lks. deep, drains SW.

36.00 Leave dense cedar and pinon timber, bears NE. and SW.,
enter open sage brush park.40.01 Set an iron post, 3 ft. long, $\frac{1}{4}$ in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd. $\frac{1}{4}$
S 29S 32
1912Dig pits, 18x18x12 ins. E. and W. of cor., 3 ft. dist.,
and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high,
N. of cor.

52.00 Enter dense cedar and pinon timber, bears NE. and SW.

SUBDIVISION OF T. 37 S., R. 23 E.

-48-

CHAINS

- 52.00 Cross head of canon, 8 chs. wide, 75 ft. deep, drains SE.
 80.03 The cor. of secs. 29, 30, 31 and 32.
 Land, rolling. Soil, sandy loam, 1st rate.
 Timber, cedar and pinon. Undergrowth, sagebrush.

Thence I run

S. $89^{\circ}48'W.$ on random line bet. secs. 30 and 31.40.00 Set temp. $\frac{1}{4}$ sec. cor.

77.46 Intersect the Colo. G. Mer. 25 lks. S. of the cor. of secs. 25, 30, 31 and 32, which is a sandstone 5x7x10 ins. above ground, marked with 5 notches on N. and 1 notch on S. edge.

Thence N. $89^{\circ}52'E.$ on true line bet. secs. 30 and 31.

Asc. abruptly over broken rocky SE. slope of Recapture Canon, over a series of small ridges and ravines, covered with dense cedar and pinon timber.

35.00 Top of abrupt asc., bears NE. and SW..

250 ft. above cor. continue over rolling mesa.

37.46 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor. bet. secs. 30 and 31, with brass cap mkd.

$$\begin{array}{c} \frac{1}{4} \\ \text{S } 30 \\ \hline \text{S } 31 \\ 1913 \end{array}$$

from which

A cedar, 14 ins. in diam., bears N. $88^{\circ}E.$, 25 lks. dist. mkd. $\frac{1}{4}$ S 30 E T.

A cedar, 10 ins. in diam., bears S. $60^{\circ}W.$, 9 lks. dist. mkd. $\frac{1}{4}$ S 31 E T.

64.00 Abandoned Bluff-Monticello Road, bears NE. and SW.

77.46 The cor. of secs. 29, 30, 31 and 32.

Land, rolling and broken.

Soil, sandy loam on mesa, stony and adobe in canon, 1st and 4th rates.

Timber, cedar and pinon, an occasional cottonwood in canon bottom.

July 19, 1913.

SUBDIVISION OF T. 37 S., R. 23 E.

CHAINS July 13: At 8h 05m a.m., l.m.t., I set off $37^{\circ}34'N.$ on the lat. arc. $21^{\circ}51'N.$ on the decl. arc. and at the cor. of secs. 29, 30, 31 and 32, determine the meridian with the solar.

Thence I run:

N. $0^{\circ}03'W.$ bet. secs. 29 and 30.

Over rolling mesa, covered with scattering scrub cedar and pinon timber.

13.00 Abandoned Bluff-Monticello Road, bears NE. and SW.

36.00 Dry draw, 30 lks. wide, 5 lks. deep, drains W.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor. with brass cap mkd.
$$\begin{array}{c|c} \frac{1}{4} \\ S 30 & S 29 \\ \hline 1912 \end{array}$$

from which

A pinon, 10 ins. in diam., bears N. $36^{\circ}E.$
38 lks. dist. mkd. $\frac{1}{4}$ S 29 B.T.

A pinon, 8 ins. in diam., bears N. $59^{\circ}W.$,
40 lks. dist. mkd. $\frac{1}{4}$ S 30 B.T.

48.00 Start abrupt desc. over broken SW. slope of Recapture Canon, over a series of ridges and ravines.

63.00 Dim road on dugway, bears E. and W.

67.00 Bottom of abrupt desc; asc. over low ridge projecting W.

76.00 Top of ridge, bears E. and W. Desc.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 19, 30, 29 and 30, with brass cap mkd.

T 37 S R 23 E

$$\begin{array}{c|c} S 19 & S 20 \\ \hline S 30 & S 29 \end{array}$$

1912

Raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. Land, rolling and broken.

Soil, sandy loam on mesa, adobe and stony on slopes, 1st and 4th rates.

Timber, scrub cedar and pinon.

Subdivision of T. 37 S., R. 23 E.

Chains.

- Thence I run
 N. $89^{\circ} 44'$ E., on random line bet. secs. 20 and 29.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.23 Intersect the N. and S. line, 7 lks. N. of the cor. of
 secs. 20, 21, 28 and 29.
 July 13: At 12h 05m, p. m., 1. m. t., I set off $21^{\circ} 49'$
 N. on the decl. arc, and at the cor. of secs. 20, 21,
 28 and 29, observe the sun on the meridian, the result-
 ing lat. is $37^{\circ} 35'$ N.
 Thence, S. $89^{\circ} 47'$ W., on true line bet. secs. 20 and 29.
 Over rolling mesa, covered with scattering scrub cedar
 timber, and sage brush undergrowth.
 19.00 Abandoned Bluff-Monticello Road, bears NE. and SW.
 35.70 Dim road, bears NE. and SW.
 40.11 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
 the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 20
—
S 29
1912

From which

A cedar, 16 ins. in diam., bears N. 70° W.,
 79 lks. dist., mkd. $\frac{1}{4}$ S 20 BT.

A cedar, 12 ins. in diam., bears S. 58° W.,
 68 lks. dist., mkd. $\frac{1}{4}$ S 29 BT.

Enter dense cedar and pinon timber, bears NE. and SW.

- 54.00 Start abrupt desc. over broken slope of mesa, bears NE.
 and SW.
 76.00 Foot of abrupt desc., bears NE. and SW.; desc. gradually.
 80.23 The cor. of secs. 19, 20, 29 and 30.
 Land, rolling and broken.
 Soil, sandy loam on mesa, adobe and stony on canon slope;
 1st and 4th rates.
 Timber, cedar and pinon. Undergrowth, sagebrush.

 Thence I run
 S. $89^{\circ} 59'$ W., on random line bet. secs. 19 and 30.

Subdivision of T. 37 S., R. 23 E.

Chains.	
40.00	Set temp. $\frac{1}{4}$ sec. cor.
77.79	Intersect. the Colo. G. Mer. 25 lks.. S. of the cor. of secs. 19, 24, 25 and 30, which is A sandstone 8x10x6 ins. above ground, firmly set and mkd. with 2 notches on the S. and 4 on the N. edges. Thence, S. $89^{\circ} 50'$ E., on true line bet. secs. 19 and 30. Desc. over broken land, covered with dense cedar and pinon timber.
19.80	Small canon, 5 chs. wide, 50 ft. deep, drains S.; asc.
.23.90	Top of spur of ridge, projects S.; desc. gradually,
30.00	Dry draw, 20 lks. wide, 5 lks. deep, drains S.; asc.
34.00	Top of asc., bears N. and S.; desc. abruptly .
36.00	Ridge rock 130 ft. high, bears N. and S.; continue desc., over broken W. slope of Recapture Canon.
37.79	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins..in the ground for, the $\frac{1}{4}$ sec. cor., with brass cap mkd.

 $\frac{1}{4}$
S 19S 30
1912

	Raise mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
	No trees fit for bearing trees.
50.00	Foot of broken abrupt desc., bears N. and S., desc. gradually over sandy land in bottom of canon.
52.00	West bank of Recapture Creek, 10 lks. wide, water in holes. Cottonwood trees along bank.
53.00	East bank of Recapture Creek, bears NE. and SW.
.59.80	Foot of slope on E. side of canon, bears N. and S.; asc. over broken bottom of canon, over ridges and ravines.
77.79	The cor. of secs. 19, 20, 29 and 30. Land broken. Soil, sandy loam on mesa, adobe and sandy in canon, 4th rate. Timber, cedar and pinon.

July 13, 1912.

Subdivision of T. 37 S., R. 23 E.

Chains.

July 17 At 8h 06m, a. m., l. m. t., I set off $37^{\circ} 35'$ N. on the lat. arc, $21^{\circ} 13'$ N. on the decl. arc, and at the cor. of secs. 19, 20, 29 and 30, determine the meridian with the solar.

Thence I run

N. $0^{\circ} 03'$ W., bet. secs. 19 and 20.

Desc, abruptly over broken land in Recapture Canon, covered with scattering scrub cedar timber.

2.00 Foot of abrupt desc., bears NE. and SW.; leave timber enter open barren land. asc.

5.00 Top of asc., bears NE. and SW.; desc. on east slope of canon.

24.00 Head of canon, 8 chs. wide, drains SW.

32.00 Enter scattering scrub cedar timber, bears E. and W.

40.00 Set on iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the cor. of sec. 20, with brass cap mkd.

S 19	S 20
1912	

From which

A cedar, 10 ins. in diam., bears N. 75° E.,
34 lbs. dist., mkd. $\frac{1}{4}$ S 20 BT.

A cedar, 10 ins. in diam., bears S. 70° W.,
63 lbs. dist., mkd. $\frac{1}{4}$ S 19 BT.

42.00 Asc. over SE. point of spur.

46.00 Rim rock, 40 ft. high, bears N. 10° E. and S. 10° W.

50.00 Set on iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 17, 18, 19 and 20, with brass cap mkd.

T37 S R 23 E	
S 18	S 17

S 19	S 20
1912	

From which

A cedar, 10 ins. in diam., bears N. 30° E.,
56 lbs. dist., mkd. T37S R23E S17 BT.

Subdivision of T. 37 S., R. 23 E.

Chains.

A cedar, 8 ins. in diam., bears S. 35° E.,
129 lks. dist., mkd. T37S R23E S20 BT.

A cedar, 20 ins. in diam., bears S. 33° W.,
115 lks. dist., mkd. T37S R23E S19 BT.

A cedar, 24 ins. in diam., bears N. 40° W.,
50 lks. dist., mkd. T37S R23E S18 BT.

Land broken.

Soil adobe and sandy in canon, rocky on slopes; 4th rate.

Timber, scrub cedar and pinon.

Thence I run:

N. $89^{\circ} 47'$ E., on random line bet. secs. 17 and 20.40.00 Set temp. $\frac{1}{4}$ sec. cor.80.22 Intersect the N. and S. line, 5 lks. N. of the cor. of
secs. 15, 17, 20 and 21.

July 17: At 12h 06m, p. m., l. m. t., I set offn $21^{\circ} 11'$
N. on the decl. arc, and at the cor. of secs. 16, 17,
20 and 21, observe the sun on the meridian, the result-
ing lat. is $37^{\circ} 36'$ N.

Thence, S. $89^{\circ} 49'$ W., on true line bet. secs. 17 and 20.Over rolling broken mesa, covered with dense cedar and
pinon timber.20.20 Edge of mesa, bears NE. and S., desc over broken E. slope
of canon, over a series of ridges and ravines.36.00 Dry draw, 50 lks. wide, 15 lks. deep, drains SW., 200 ft.
below top of mesa; asc. abruptly over broken rocky
slope of point of mesa.40.11 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 17

S 20
1912

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
No trees fit for bearing trees.

55.00 Top of spur of mesa, projects S.; desc. abruptly.

70.00 Dry draw, 60 lks. wide, 10 lks. deep, in canon, drains S..

Subdivision of T. 37 S., T. 23 E.,

Chains.

- asc. abruptly over broken rocky W. slope of canon.
 79.30 Rim rock, 50 ft. high, bears N. and S., continue asc.
 80.22 The cor. of secs. 17, 18, 19 and 20.
 Land rolling and broken.
 Soil, sandy loam on mesa, adobe and stony in canon, 2nd
 and 4th rates.
 Timber, cedar and pinon.
-

Thence I run

N. 89° 50' W., on random line bet. secs. 18 and 19.

- 40.00 Set temp. & sec. cor.
 77.90 Intersect the Colo. G. Mer. at the cor. of secs. 13, 18,
 19 and 24, which is
 A sandstone, 5x3x7 ins. above ground, firmly set; mkd.
 with 3 notches on the N. and S. edges.
 Thence, S. 89° 50' E., on true line bet. secs. 18 and 19.
 Asc. over broken land, covered with dense cedar and pinon
 timber.

- 20.00 Top of ridge, bears N. and S.; desc. abruptly into Recap-
 ture canon.
 36.00 Rim rock, 75 ft. high, bears N. and S., continue desc.
 over broken rocky slope of Recapture Canon.
 37.90 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
 the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S 18'S 19'
1912

- Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
 No trees fit for bearing trees.
 50.00 Bottom of abrupt desc., bears N. and S.; continue over
 level sandy bottom of canon, covered with scrub oak
 undergrowth.
 53.00 Recapture Creek, 10 lks. wide, water in holes, course S.;
 in canon 250 ft. deep.; asc. abruptly over broken E.
 slope of canon.
 67.00 Rim rock 80 ft. high, bears N. and S., continue over

Chains.

rolling paint of mesa.

76.00 Top of rolling mesa, bears N. and S.; desc. gradually.

77.90 The cor. of secs. 17, 18, 19 and 20.

Land, broken.

Soil, adobe, rocky and sandy; 4th rate.

Timber, cedar and pinon.

July 17, 1912.

July 18: At 9h06m, a. m., l. m. t., I set off $37^{\circ} 35' 30''$ N. on the lat. arc, $21^{\circ} 02'$ N. on the decl. arc, and at the cor. of secs. 17, 18, 19 and 20, determine the meridian with the solar.

Thence I run

N. $0^{\circ} 03'$ W., bet. secs. 17 and 18.

Asc. gradually over E. slope of paint of mesa, covered with scattering scrub cedar timber.

22.00 Top of asc., bears N. 20° E. and S.; enter dense cedar and pinon timber. on rolling mesa.

34.00 Dry draw, 20 lks. wide, drains SE.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	S 18	S 17
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1912

From which

A pinon, 10 ins. in diam., bears N. 35° E.,
79 lks. dist., mkd. $\frac{1}{4}$ S 17 BT.

A cedar, 15 ins. in diam., bears N. 81° W.,
52 lks. dist., mkd. $\frac{1}{4}$ S 18 BT.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 7, 8, 17 and 18, with brass cap mkd.

T 37 S R 23 E

S 7	S 8
<hr/>	
S 18	S 17

1912

Subdivision of T. 30 S., R. 23 E.

Chains.

From which

A pinon, 10 ins. in diam., bears N. 19° E.,
73 lks. dist., mkd. T37S R23E S8 BT.

A cedar, 18 ins. in diam., bears S. 45° E.,
13 lks. dist., mkd. T37S R23E S17 BT.

A cedar, 22 ins. in diam., bears S. 65° W.,
30 lks. dist., mkd. T37S R23E S18 BT.

A pinon, 18 ins. in diam., bears N. 87° W.,
55 lks. dist., mkd. T37S R23E S7 BT.

Land, rolling.

Soil, sandy loam and gravel; 2nd and 3rd rates.

Timber cedar and pinon.

July 18: At 12h 06m, p. m., l. m. t., I set off $21^{\circ} 00'$
 $30''$ N. on the decl. arc, and at the cor. of secs. 7, 8,
17 and 18, observe the sun on the meridian, the result-
ing lat. is $37^{\circ} 36'$ N.

July 18, 1912.

July 19: At 2h06m, p. m., l. m. t., I set off $37^{\circ} 36'$
 $30''$ N. on the lat. arc, $29^{\circ} 49'$ N. on the decl. arc, and
at the cor. of secs. 7, 8, 17 and 18, determine the meri-
dian with the solar.

Thence I run

N. $89^{\circ} 49'$ E., on random line bet. secs. 8 and 17.40.00 Set temp. $\frac{1}{4}$ sec. cor.79.98 Intersect the N. and S. line, 5 lks. N. of the cor. of
secs. 8, 9, 16 and 17.Thence, S. $89^{\circ} 51'$ W., on true line bet. secs. 8 and 17.Over rolling mesa covered with dense cedar and pinon
timber.

8.00 Dry draw, 50 lks. wide, 10 lks. deep, drains S.

27.00 Dry draw, 30 lks. wide, 10 lks. deep, drains S., leave
cedar and pinon timber, bears N. and S., enter open
sage brush park.39.99 Set an iron post, 3 ft. long 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

Chains.

 $\frac{1}{4}$
S 8'S 17
1912

- Dig pits, 18x18x12 ins. E. and W. of post, 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 54.00 Top of low rolling ridge, bears N. and S.; enter dense cedar and pinon timber; desc. abruptly over rim rock.
- 61.00 Bottom of desc., 150 ft. deep, bears N. and S., continue over sandy canon bottom, leave cedar and pinon timber, enter scrub oak undergrowth.
- 62.50 Dry canon draw, $1\frac{1}{2}$ chs. wide, drains S.; asc.
- 66.00 Asc. abruptly over W. slope of canon.
- 73.00 Top of abrupt asc., bears N. and S., continue gradually asc. over rolling mesa, covered with dense cedar and pinon timber.
- 79.98 The cor. of secs. 7, 8, 17 and 18.
Land, rolling and broken.
Soil, sandy loam. and stone; 1st ate 4th rates.
Timber, cedar and pinon.

July 19, 1912.

July 18: At 2h06m, p. m., 1. m. t., I set off $37^{\circ} 36' 30''$ S. on the lat. arc, $21^{\circ} 00'$ N. on the decl. arc, and at the cor. of secs. 7, 8, 17 and 18, determine the meridian with the solar.

Thence I run

N. $89^{\circ} 50'$ W., on random line bet. secs. 7 and 18.40.00 Set temp. $\frac{1}{4}$ sec. cor.

77.98 Intersect the Colo. G. Mer. 2 lks. N. of the cor. of secs. 7, 12, 13 and 18., which is

A sand stone, 10x8x6 ins. above ground firmly set; mkd. with 2 notches on the N. and 4 on the S. edges.

Thence, S. $89^{\circ} 51'$ E., on true line bet. secs. 7 and 18.

Over rolling broken mesa, covered with dense cedar and pinon timber.

Chains.

- 14.00 Dry draw, 30 lks. wide, drains SE.
- 16.00 Dry draw, 1 ch. wide, drains S.
- 33.00 Dry draw, 1 ch. wide, drains SE.
- 37.98 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
 $\frac{1}{4}$
S 7
- S 18 ✓
1912
- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
No trees fit for bearing trees.
- 39.00 Top of low rolling ridge, bears N. and S.; desc.
- 40.00 Rim rock, 50 ft. high, bears N. and S.; desc. abruptly
over broken W. slope of Recapture Canon.
- 48.00 Bottom of abrupt desc., bears N. and S., continue over
sandy bottom of canon, covered with scrub oak undergrowth.
- 60.00 Recapture Creek, 10 lks. wide, water in holes, 200 ft.
below top, course S.; asc. abruptly over broken E. slope
of Recapture Canon, covered with dense cedar and pinon
timber.
- 67.00 Rim rock, 80 ft. high, bears N. and S., continue asc. over
rolling point of mesa.
- 77.98 The cor. of secs. 7, 8, 17 and 18.
Land broken.
Soil, rocky, adobe and sandy.; 4th rate.
Timber, cedar and pinon pine. July 18, 1912.
-
- July 20: At 8h 06m, a. m.; l. m. t., I set off $37^{\circ} 36' 30''$ N. on the lat. arc, $20^{\circ} 41'$ N. on the decl. arc,
and at the cor. of secs. 7, 8, 17 and 18, determine the
meridian with the solar.
- Thence I run
N. $0^{\circ} 03'$ W., bet. secs. 7 and 8.
Over rolling mesa, covered with dense cedar and pinon
timber.
- 26.00 Head of canon, 1 ch. wide, 50 ft. deep, drains SE.
- 29.00 Head of canon, 4 chs. wide, 100 ft. deep, rimrock 30 ft.
high, drains SW.

Subdivision of T. 36 S., R. 23 E.

Chains.

- 40.00 Set an iron post, 3 ft. long, 2 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

4'	0'
3' 7"	0' 0"
1912	

From which

A cedar, 16 ins. in diam., bears S. 69° W.,
54 lks. dist., mkd. $\frac{1}{4}$ SE BT.

A cedar, 6 ins. in diam., bears S. 87° E.,
25 lks. dist., mkd. $\frac{1}{4}$ SE BT.

- 46.00 Dry draw, 30 lks. wide, 5 lks. deep, drains SW.; sec.

- 50.00 Top of sec., bears NE. and SW.; none.

- 62.00 Dry draw, 50 lks. wide, 10 lks. deep, drains SW.

- 77.00 Dry draw, 30 lks. wide, 5 lks. deep, drains SW.; sec.

- 80.00 Set an iron post, 3 ft. long, 2 in. in diam., 24 ins. in the ground for the cor. of secs. 5, 6, 7, and 8, with brass cap mkd.

T 37 S N 23 E	
S 6'	S 5'
<hr/>	
S 7'	S 8'
1912	

From which

A cedar, 12 ins. in diam., bears N. 52° E.,
32 lks. dist., mkd. T37S R23E S5 BT.

A cedar, 24 ins. in diam., bears S. 60° E.,
54 lks. dist., mkd. T37S R23E S2 BT.

A cedar, 18 ins. in diam., bears S. $77^{\circ}30'W.$,
44 lks. dist., mkd. T37S R23E S7 BT.

A cedar, 16 ins. in diam., bears N. $13^{\circ}30'W.$,
43 lks. dist., mkd. T37S R23E S6 BT.

Land rolling.

Soil, sandy loam; 2nd ratn.

Timber, cedar and pinon.

July 20: At 12h06m, p. m., l. m. t., I set off $20^{\circ} 39'$
N. on the decl. arc, and at the cor. of secs. 5, 6, 7,
and 8, observe the sun on the meridian, the resulting
lat. is $37^{\circ} 37' N.$

Subdivision of T. 37 S., R. 23 E.

Chains.

Thence I run

N. $89^{\circ} 51'$ E., on random line bet. secs. 5 and 8.40.00 Set temp. $\frac{1}{4}$ sec. cor.79.67 Intersect the N. and S. line, at the cor. of secs. 4, 5,
8 and 9.Thence, S. $89^{\circ} 51'$ W., on true line bet. secs. 5 and 8.Over rolling sage brush mesa, covered with scattering
scrub cedar timber.

27.70 Dry draw, 50 lks. wide, 5 lks. deep, drains S.

36.00 Leave scattering, enter dense scrub cedar and pñon
timber, bears N. and S.39.83 Set an iron post, 3 ft. long, 1 in. in diam., 24 in.
in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.S 5S 8
1912Dig pits, 18x18x12 ins. E. and W., 3 ft. dist., and raise
a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.54.50 Canon, 4 chs. wide, 100 ft. deep, drains South, with rim
rock 75 feet high on W. and 40 ft. high on E. sides.
Extensive cliff ruins in good state of perservation, 3
chs. N. and 2 chs. S. of line. Spring of clear cold
water 2 chs. N. of line,

74.00 Top of low rolling ridge, bears N. and S.; desc.

77.00 Dry draw, 30 lks. wide, 10 lks. deep, drains SW.; asc.

79.67 The cor. of secs. 5, 6, 7 and 8.

Land, rolling.

Soil, sandy loam; 1st rate!

Timber, scrub cedar and pinon.

No trees fit for bearing trees at the $\frac{1}{4}$ sec. cor.

July 20, 1912.

July 23: At 8h 06m, a. m., 1: m. t., I set off $37^{\circ} 37'$ N.
On the lati. arc, $20^{\circ} 06'$ N. on the decl. arc, and at
the cor. of secs. 5, 6, 7 and 8; determine the meridian
with the solar.

Chains. Thence I run
 N. $89^{\circ} 51'$ W., on random line bet. secs. 6 and 7.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 78.19 Intersect the Colo. G. Mer. 14 lks. S. of the cor. of
 secs. 1, 6, 7 and 12; which is
 A sand stone, 12x4x6 ins. above ground, firmly set. mkd.
 with 5 notches on the N. and 1 notch on the S. edges.
 Thence, S. $89^{\circ} 45'$ E., on true line bet. secs. 6 and 7.
 Over rolling and broken land, covered with dense scrub
 cedar and pinon timber.
 14.20 Dry draw, 20 lks. wide, 5 lks. deep, drains SE.; asc.
 34.20 Top of asc., bears N. and S., desc. abruptly over rim
 rock, 60 ft. high, on W. rim of Recapture Canon.
 38.19 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
 the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 6

S 7

1912

From which

A cedar, 14 ins. in diam., bears N. 85° E.,
 29 lks. dist., mkd. $\frac{1}{4}$ S 6 BT.

A cedar 10 ins. in diam., bears S. 36° W.,
 80 lks. dist., mkd. $\frac{1}{4}$ S 7 BT.

- 43.20 Bottom of abrupt desc., bears N. and S., continue over
 level sandy bottom of canon.
 46.00 Recapture Creek, 10 lks. wide, 1 lk. deep, water clear,
 cottonwood trees along banks.
 50.00 Leave sandy bottom land, bears N. and S.; asc. abruptly
 over broken E. slope of Recapture Canon.
 62.20 Rim rock, 70 ft. high, bears N. and S., continue asc.
 64.00 Top of ridge, bears N. and S., desc. gradually.
 70.00 Canon, 4 chs. wide, 75 ft. deep, drains S. 20° W.
 74.00 Edge of mesa, bears N. and S., continue over rolling
 mesa.
 78.19 The cor. of secs. 5, 6, 7 and 8.
 Land broken.

Subdivision of T. 37 S., R. 23 E.

Chains.

Soil, sandy, adobe and stony; 4th rate.

Timber scrub cedar and pinon.

July 23: At 12h06m, p. m., l. m. t., I set off $20^{\circ} 04' N.$
on the decl. arc, and at the cor. of secs. 5, 6, 7, and
8, observe the sun on the meridian; the resulting lat.
is $37^{\circ} 37' N.$

Thence I run

N. $0^{\circ} 03'$ W., on random line bet. secs. 5 and 6.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.71 Intersect the N. bdy. ^{of Tp} 8 lks. E. of the cor. of secs. 5, 6,
31 and 32, heretofore described.

Thence, S. $0^{\circ} 06'$ E., on true line bet. secs. 5 and 6.

Over rolling mesa, covered with scattering scrub cedar timber.

39.71 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	S 6	S 5
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1912

From which

A cedar, 15 ins. in diam., bears S. $84^{\circ} 30' E.$,
76 lks. dist., mkd. $\frac{1}{4}$ S5 BT.

A cedar, 10 ins. in diam., bears S. $88^{\circ} W.$,
39 lks. dist., mkd. $\frac{1}{4}$ S6 BT.

49.70 Leave scattering scrub cedar timber, bears E. and W., enter
dense cedar and pinon timber.

53.20 Dry draw in canon, 3 chs. wide, 50 ft. deep, drains SW.

56.50 Dry draw, in canon, 2 chs. wide, 50 lks. deep, drains W.

70.00 Dry draw, 20 lks. wide, 5 lks. deep, drains SW.

79.71 The cor. of secs. 5, 6, 7, and 8.

Land rolling.

Soil, sandy loam; 2nd rate.

Timber scrub cedar and pinon.

July 23, 1912

G. S. Shama

U. S. Surveyor.

GENERAL DESCRIPTION.

The eastern and western portions of this township are badly broken by box canons.

Alkali Canon in the eastern part is about one mile wide, and about 200 ft. below the cedar and pinon covered mesas on each side.

There are usually perpendicular sandstone ledges from a few feet to 50 ft. high, at the mesa edges, where the descent into the canon begins.

From these ledges, the descent into Alkali Wash, is over broken soil washed surface, deep washes and sharp ridges and sandstone boulders. This surface is generally barren, except for scattered clumps of scrub cedar and pinon.

Alkali Wash, has no running water, except after heavy rains or melting snow in season.

There are a few springs in the branch canons, and the sides of the canons draining into Alkali Canon.

We are told that water may be found, even in dry season, by digging a few feet in the bottom of the main wash.

Recapture Canon in the western part of the township is not generally so wide as Alkali Canon, otherwise the same general description, applies, except, that the creek in this canon, has much more water than Alkali Wash, and flows later in the season.

There are numerous ruins, of the prehistoric Cliff Dwellings along the ledges of both canons. Some of these are still in good state of preservation, but recent visitors either without thought, or proper consideration are very free in their acts of demolition of these ancient habitations, of interest.

There are many remains of the mesa dwellings of this prehistoric race, both on the timbered and open sagebrush mesas.

These, like the Cliff Dwellings, were constructed of sandstone, the top walls of which appear on the surface,

T.37 S.R.23 E.

but he walls have stood so long, that the loose sand and earth has drifted, filling them to the top, and in many instances full grown cedar and pinon have matured, since the earth was so deposited.

There is a strip of sagebrush mesa, extending north and south through the central portion of the township, on which there is generally good grazing.

The surface is gently rolling, and if irrigated would undoubtedly produce good crops.

The soil on both the open and timbered mesas, is of a rich appearance, and might possibly yield well from dry farming. There is only one spring of much capacity in the township, and is known as Mustang Spring. In fact there are two of them, near the center of sec. 9. These run the year round, and furnish quite a supply of stock water. The water is slightly alkali, but is used by camping parties and stock men.

The other springs noted in the field notes, are small but some have water quite clear of alkali.

No coal, or other mineral indications, of apparent consequence was observed.

There are no settlers in the township.

One settler in T.37 S.R.22 E, has run his plowing and fencing of about 5 acres into the W. 1/4 of sec. 6.

Daniel B. Miller,

J. C. Shantz
U.S. Surveyors.

For oaths of U.S. Surveyors, and certificates of assistants see Book "N" of this Group.

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CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability,
....., U. S. Surveyor, during the periods and in the capacities
stated opposite our several signatures, in surveying all those parts or portions of

For certificate of assistants see book "V" T.39 S., R.26 E.

of the Meridian, in the State of

which are represented in the foregoing field notes as having been executed by him, and under his direction; and that said survey has been, in all respects, to the best of our knowledge and belief, well and faithfully executed.

Subscribed and certified to before me on the dates of the final service as shown above.

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oaths of U.S. Surveyors see book "V" T. 39 S., R. 26 E.

of the _____

Meridian, in the State of _____, which are represented by the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191_____ }



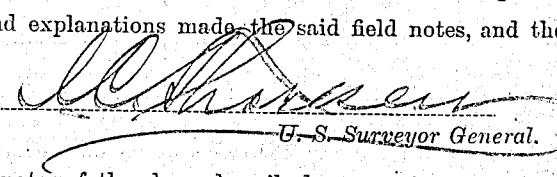
APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 2 _____, 1915.

The foregoing field notes of the survey of _____ the Subdivisional lines of Township No. 37 South, Range No. 23 East of the Salt Lake Base and Meridian, Utah

executed by Daniel B. Miller and Joseph C. Thoma
their _____ under his special instructions dated March 26, 1912, having been
critically examined, and the necessary corrections and explanations made to the said field notes, and the surveys they describe, are hereby approved.


U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

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BOOK A-412

Filed Jul 1 1913

HEW

FIELD NOTES

OF THE SURVEY OF THE

E A S T B O U N D A R Y

O F

T. 36 S., R. 23 E.

Of the Salt Lake Base and Meridian,

In the State of U T A H.

EXECUTED BY

Daniel B. Miller and Jos. C. Thoma,

In the capacity of U. S. Surveyor, under instructions dated March 26, 1912,
issued by the United States Surveyor General to govern surveys included in
Group No. 16, which were approved by the Commissioner of the General Land
Office, April 2, 1912.

Survey commenced July 25, 1912., 191

Survey completed August 7, 1912., 191

BOOK A 412

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31	32	33	34	35	36

East Boundary of T. 36 S., R. 23 E.

Chains.

Survey commenced July 25, 1912, and executed with a Young & Sons light mountain transit No. 8477. (The description of instrument and test of solar apparatus are fully set forth in the notes of the E. and N. Bdys. of T. 37 S., R. 23 E., Page 1.)

July 25: At 2h 06m, p. m., l. m. t., I set off $37^{\circ} 38'$ N. on the lat. arc, $19^{\circ} 37'$ N. on the decl. arc; and, at the cor. of Tps. 36 and 37 S., Rgs. 23 and 24 E., determine the meridian with the solar.

Thence I run, (township cor. heretofore described.)

North, bet. secs. 31 and 36.

Asc. over rolling mesa, covered with dense cedar and pinon timber.

- 4.00 Dry draw 30 lks. wide, drains SE.
- 18.00 Large village of fallen ruins, 4 chs. E., on edge of canon. Spring of clear cold water in bottom of canon.
- 22.00 Large village of fallen mesa ruins, 4 chs. W.; lower walls still standing. (See sketch and photo.)
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S 36	S 31
1912	

From which

A cedar, 18 ins. in diam., bears S. $46^{\circ} 30'$ E.,
53 lks. dist., mkd. $\frac{1}{4}$ S 31 BT.

A cedar, 10 ins. in diam., bears S. 63° W.,
41 lks. dist., mkd. $\frac{1}{4}$ S 36 BT.

- 42.00 Dry draw, 50 lks. wide, drains SE.

- 50.00 Dry draw, drains SE.; 30 lks. wide.

- 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for the cor. of secs. 25, 30, 31 and 36, with brass cap mkd.

T 36 S	
R 23 E	R 24 E
S 25	S 30
S 36 S 31	
1912	

Chains.

From which

A cedar, 16 ins. in diam., bears N. 76° E.,
56 lks. dist., mkd. T36S R24E S30 BT.

A cedar, 15 ins. in diam., bears S. 44° E.,
32 lks. dist., mkd. T36S R24E S31 BT.

A cedar, 6 ins. in diam., bears S. 16° W.,
62 lks. dist., mkd. T36S R24E S36 BT.

A cedar, 10 ins. in diam., bears N. 35° W.,
140 lks. dist., mkd. T36S R23E S25 BT.

Land rolling.

Soil, sandy loam; 1st rate.

Timber, cedar and pinon.

July 25, 1912.

July 26: At 9h06m, a. m., 1st m. t., I set off $37^{\circ} 39'$ N.
on the lat. arc, $19^{\circ} 26' 30''$ N. on the decl. arc, and
at the cor. of secs. 25, 30, 31 and 36, determine the
meridian with the solar.

Thence I run

North, bet. secs. 25 and 30.

Over rolling mesa, covered with dense cedar and pinon
timber.

29.00 Dry draw, 20 lks. wide, drains SW.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S 25 | S 30

1912

From which A cedar, 10 ins. in diam., bears S. 93° E.,
28 lks. dist., mkd. $\frac{1}{4}$ S30 BT.

A cedar, 14 ins. in diam., bears N. 56° W.,
29 lks. dist., mkd. $\frac{1}{4}$ S 25 BT.

50.00 Mesa ruins on line.

68.00 Start gradual desc., bears E. and W.

74.00 Dry draw, 30 lks. wide, drains NW.; asc.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in
the ground for the cor. of secs. 19, 24, 25 and 30,

East boundary of T. 36 S., R. 23 E.

Chains.

with brass cap mkd.

T 36 S	
R 23 E	R 24 E
S 24	S 19

S 25	S 30
1912	

From which

A cedar, 14 ins. in diam., bears N. 70° E.,
75 lks. dist., mkd. T36S R24E S19 BT.

A pinon, 12 ins. in diam., bears S. 63° E.,
74 lks. dist., mkd. T36S R24E S30 BT.

A pinon, 14 ins. in diam., bears S. 10° W.,
69 lks. dist., mkd. T36S R23E S25 BT.

A pinon, 14 ins. in diam., bears N. 82° W.,
76 lks. dist., mkd. T36S R23E S24 BT.

Land, rolling.

Soil, sandy loam; 1st rate.

Timber, cedar and pinon.

July 26: At 12h 06m, p.m., l. m. t., I set off $19^{\circ} 25'$
N. on the decl. arc, and at the cor. of secs. 19, 24,
25 and 30, observe the sun on the meridian, the result-
ing lat. is $37^{\circ} 40'$ N.

Thence I run

North, bet. secs. 19 and 24.

Over level mesa covered with dense cedar and pinon timber.

0.50 Desc. abruptly over rim rock 70 ft. high, bears NW. and
SW.; continue abrupt desc. over broken S. slope of canon
over a series of ridges and ravines.

25.00 Dry draw, 2 chs. wide, drains SE., 250 ft. below mesa.;
asc. over broken N. slope of canon.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	
S 24	S 19
1912	

From which

A cedar, 10 ins. in diam., bears S. 45° W.,
48 lks. dist., mkd. $\frac{1}{4}$ S24 BT.

A cedar, 8 ins. in diam., bears S. 35° E.,

East Boundary of T. 36 S., R. 23 E.

Chains.

78 lks. dist., mkd. & S19 BT.

79.00 Rim rock 40 ft. high, bears E. and W.; Top of mesa, 250
ft above bottom of canon.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in
the ground for the cor. of secs. 13, 18, 19 and 24,
with brass cap mkd.

T 36 S	
R 23 E	R 24 E
S 13	S 18
S 24	S 19
	1912

From which

A pine, 10 ins. in diam., bears N. 32° E.,
25 lks. dist., mkd. T36S R24E S 18 BT.

A pinon, 8 ins. in diam., bears S. 63° E.,
69 lks. dist., mkd. T36S R24E S 19 BT.

A pinon, 12 ins. in diam., bears S. 21° W.,
62 lks. dist., mkd. T36S R23E S24 BT.

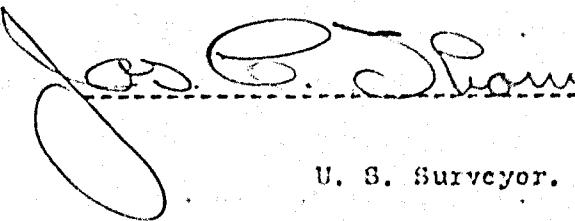
A pinon, 8 ins. in diam., bears N. 56° W.,
57 lks. dist., mkd: T 36 S R 23 E S13 BT.

Land, mountainous.

Soil, adobe and rocky; 4th rate.

Timber, cedar and pinon.

July 26, 1912.


U. S. Surveyor.

(3)

Survey of part of the E.bdy.of T.36 S.R.23 E.

The survey of this township commenced, July, 26, 1912, and executed with a Keuffel & Esser Solar Transit No. 20037, for description of which, and certificate of test for instrumental errors preliminary to the commencement of this survey, on the meridian at Salt Lake City, see Book "A" of this group.

Note. For accessibility of field work, and economy in time, in the execution of the surveys, in this township, I ran part of the subdivisional lines, therein from my camp in sec. 9 T.37 S.R.23 E, before running the E.bdy.of secs, I, I2 and I3.

For test of my instrument on Polaris meridian, and the adjustment of level and collimation errors, see page 5 of book "M" for August 3rd, and 4th.

August 7th, 1912, at the cor. of secs. I3, I8, I9 and 24, set by Jos. C. Thoma, U.S. Surveyor, July 26, 1912, at 9h.30m.a.m. l.m.t. I set off $37^{\circ}40'30''$ on the lat.arc, and $16^{\circ}25'N.$ on the dec.arc, and determine a meridian.

Thence I run,

North, bet. secs. 13 and 18, T.36 S.Rgs.23 and 24 E.

Along the eastern part of a high table ridge, over slightly rolling surface, through scat.cedar and pinon.

25.50 The N.E. edge of table or mesa, on sandstone ledge. A perpendicular descent over sandstone wall 60 ft, NW&SE, thence along broken surface on E slope of high ridge, among canon breaks, sloping E. into Devil Canon.

40.00 Set an iron post, 3 ft. long, 1 in. in diam, 24 ins. in the earth and stone, on bed rock, for the $\frac{1}{4}$ sec.cor. with a brass cap, marked,

$\frac{1}{4}$ S I3 | S I8
1912

from which, a cedar, 18 in. in diam, brs. N. $85^{\circ}E.$ 61 lks.dist. marked, $\frac{1}{4}$ S I8 B T

A cedar, 10 in. in diam, brs. S. $52^{\circ}30'W.$ 9 lks.dist. marked, $\frac{1}{4}$ S I3 B T

Survey of part of E.bdy of T.36 S.Rgs.23 and 24 E.

Chains. 75.00	Descent into canon becomes steep.				
80.00	Set an iron post 3 ft.long, 3 ins.in diam. 24 ins.in the earth and stone, on bed rock, for the cor.of secs.7,12,13 and 18 with brass cap marked				
	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>T 36 N ✓</td> </tr> <tr> <td>R 23 E ✓ R 24 E</td> </tr> <tr> <td>S 12 ✓ S 7 ✓</td> </tr> <tr> <td>S 13 ✓ S 18 ✓</td> </tr> </table> I9I2	T 36 N ✓	R 23 E ✓ R 24 E	S 12 ✓ S 7 ✓	S 13 ✓ S 18 ✓
T 36 N ✓					
R 23 E ✓ R 24 E					
S 12 ✓ S 7 ✓					
S 13 ✓ S 18 ✓					
	from which,a cedar,18 in.in diam.,brs.N.85°E.61 lks.dist. marked,T 36 S R 24 E S 7 B T				
	A pinon,7 in.in diam,brs.S.14°45'E.74 lks.dist. marked,T 36 S R 24 E S 18 B T				
	A sandstone boulder,10 X 10 X 7 ft.with X and B O cut on face opposite cor.S.48°I5'W.17 lks.dist.				
	A cedar,24 ins.in diam,brs,N.45°30'W.23 lks.dist. marked,T 36,S.R 23 E S 12 B T				
	Land,broken 54.50 chs.Slightly rolling,25.50 chs, Timber,scrub cedar,dense to scat,an occasional pinon. Soil,poor 4th,rate,stony and barren except for timber.				
Aug.7:	At this cor.at apparent noon,I set off 16°23'N.on the lat arc, and observe the sun on the meridian. The resulting lat.reading is 37°41'30"which is about correct.				
	North,bet.sec.7 and 12.				
	Over broken surface,descending into Devil Canon,through dense cedar and pinon.				
21.00	Small canon,dry,drains into Devil Canon,cse.S.70°E.asc.				
35.00	Spur,projects SE desc.				
40.00	Set an iron post 3 ft.long,1 in.in diam,24 ins.in a mound of stone and earth, on sand stone bottom,for the $\frac{1}{4}$ sec.cor,with brass cap marked				
	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>$\frac{1}{4}$ S 12 ✓</td> <td>S 7 ✓</td> </tr> </table> I9I2	$\frac{1}{4}$ S 12 ✓	S 7 ✓		
$\frac{1}{4}$ S 12 ✓	S 7 ✓				
	from which,a cedar,16 ins.in diam,brs,N.8°W.18 lks. marked, $\frac{1}{4}$ S 12 B T				

E.boundary of T.36 S.R.23 E.

Chains.

A cedar,16 ins.in diam.brs.East,15 lks.dist.
marked, $\frac{1}{4}$ S 7 B T

59.00 Devil Canon wash,dry.20 lks.wide,cse.Se.Asc.through dense sage brush,

64.00 Leave sage brush,ascent becomes steep.

80.00 Set an iron post 3 ft.long,3 ins.in diam.24 ins.in the ground,for the cor.of secs.1,6,7 and 12,with brass cap marked

T 36 N	
R 23 E	R 24 E
S 1	S 6
S 12 S 7	

1912

from which,a cedar,24 ins.in diam.brs.N.48°45'E.68 lks.
marked,T 36 S R 24 E S 6 B T

A pinon,7 in.in diam.brs.S 32°E.100 lks.dist.

marked,T 36 S R 24 E S 7 B T

A pinon,8 in.in diam.brs.S 36°45'W.121 lks.dist.

marked,T 36 S R 23 E S 12 B T

A pinon,9 in.in diam.brs.N.82°30'W.143 lks.dist.

marked,T 36 S R 23 E S 1 B T

Land,broken.

Soil,stony poor 4th,rate.

Scant grazing. Timber, cedar and pinon pine.Undergrowth sagebrush.

Aug. 7:-

At 1h,30m.p.m.l.m.t.I set off 37°42'30" on the lat.arc, and 16°22'30"N.on the dec.arc, and determine a meridian at the cor.of secs.1,6,7 and 12.

Thence North,betsecs.1 and 6.

Ascend over broken N.side of Devil Canon.Through dense cedar and pinon.

31.14 Intersect the 7th,Standard Parallel,S.26.00 chs.E.of the Standard cor.of Tp.35 S.Rgs.23 and 24 E.an iron post 3 ins.in diam.,firmly set ,and marked and witnessed as described by the Surveyor General.

East boundary of T.36 S.R.23 E.

At point of intersection, I set an iron post 3 ft. long,
3 ins in diam. 24 ins. in mound of earth and stone, on stone
base, for the closing cor. of Tp. 36 S. Rgs. 23 and 24, E. with
brass cap marked,

T 35 S
R23E | R24E
S36 | S31

C C C
SI S6
R23 E R 24E
T36S
1912

from which, a pinon, 4 ins, in diam., brs. S. 50° E. 20 lks. dist.
marked, T 36 S R 24 E S 6 B T

A pinon, 6 ins. in diam. brs. S. 30° W. 32 lks. dist.
marked, T 36 S R 23 E S 1 B T

Land, broken. canon slope.

Soil, stony, bare, poor 4th, rate.

Timber, scrub cedar and pinon.

Scant grazing.

August 7th, 1912.

Daniel B. Miller.

U.S. Surveyor.

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability,
....., U. S. Surveyor, during the periods and in the capacities
stated opposite our several signatures, in surveying all those parts or portions of

For certificate of assistants see book "V" T.39 S., R.26 E.

of the Meridian, in the State of

which are represented in the foregoing field notes as having been executed by him, and under his direction; and that said survey has been, in all respects, to the best of our knowledge and belief, well and faithfully executed.

Subscribed and certified to before me on the dates of the final service as shown above.

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191_____, I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oaths U.S. Surveyors see book "V" T.39 S., R.26 E.

of the _____ Meridian, in the State of _____, which are represented by the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191_____ }



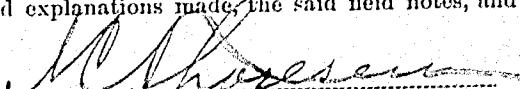
APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 2, 191____

The foregoing field notes of the survey of _____ the East Boundary of Township No. 36 South, Range No. 23 East of the Salt Lake Base and Meridian, Utah

executed by _____ Daniel B. Miller and Joseph C. Thomas
under their special instructions dated _____ March 26, 1912, having been critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.


U. S. Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

U. S. Surveyor General

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BOOK A-412

Filed Jul 1 1913

E.R.

FIELD NOTES

OF THE SURVEY OF THE

S.U.B.D.I.V.I.S.I.O.N.A.L.....L.I.N.E.S.....

O.F.....

T. 36 S., R. 23 E.

AND.....

RETRACEMENT OF PART OF THE COLORADO GUIDE MERIDIAN.....

TOWNSHIP 36 SOUTH, BETWEEN RANGES 22 and 23 EAST.....

Of the Salt Lake Base and Meridian,

In the State of U.T.A.H.

EXECUTED BY

Daniel B. Miller and Job C. Thoma,

In the capacity of U.S. Surveyor a, under instructions dated March 26, 1912,
issued by the United States Surveyor General to govern surveys included in
Group No. 16, which were approved by the Commissioner of the General Land
Office, April 2, 1912.

Survey commenced July 26th, 1912.

Survey completed August 29th, 1912.

Book A-412

INDEX DIAGRAM.

Township _____ Range _____

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Subdivision of T.36 S.R.23 E.

Chains.

Note.

The subdivisional lines run by me from July 26th, to August 2nd. inclusive in this township were run from my camp in sec.9 T.37 S.R.23 E. and my instrument was tested by me at frequent intervals on the meridian established by Polaris observation in that township July 2nd, and 3rd. The lat. and dec. arcs remaining at all times in adjustment.

July 26: At 9h.46m.a.m.l.l.m.t. I set off $37^{\circ}38'$ on the lat.arc, and $19^{\circ}26'$ N. on the dec.arc, and determine a meridian with the solar at the corner of secs. 1, 2, 35 & 36 on the S.bdy. of the township established by Jos.C.Thoma U.S.Surveyor under this survey July 9th, 1912.,
Thence, N.0°01'W. bet secs. 35 and 36.

Over rolling mesa, gradually descending through very dense growth of cedar and pinon.

27.75 Wash, dry, 6 lks. wide, 5 ft. deep. cse. W. grad. asc.

40.00 Set an iron post 3 ft. long, 1 in. in diam. 24 ins. in the ground, for the $\frac{1}{4}$ sec.cor. with brass cap marked

$\frac{1}{4}$	S 35	|	S 36
---------------	------	--	------

1912

from which, a cedar, 10 in. in diam brs, N. 42° E. 60 lks. dist. marked, $\frac{1}{4}$ S 36 B T

A cedar, 7 in. in diam., brs. S. $45^{\circ}30'$ W. 15 lks. dist. marked, $\frac{1}{4}$ S 35 B T

80.00 Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for the cor.of secs. 25, 26, 35 and 36, with brass cap marked

T 36 S	R 23 E
S 26	S 25
S 35	S 36

1912

from which, a pinon, 12 ins. in diam., brs. N. 42° E. 60 lks. dist. marked, T 36 S R 23 E S 25 B T

A cedar, 8 ins. in diam., brs. S. 25° E 83 lks. dist. marked, T 36 S R 23 E S 36 B T

A cedar, 8 ins. in diam. brs. S 59° W. 82 lks. dist. marked, T 36 S R 23 E S 35 B T

Subdivision of T 36 S.R 23 E.

Chains.

A cedar, 10 ins. in diam. brs. N. 59° W. 27 lks. dist.

marked, T 36 S R 23 E S26 S T

Land, rolling.

Soil, rich sandy bench loam. Ist, rate if irrigated.

Timber, dense cedar and pinon.

Scant grazing.

July 26, 1912.

July 29, At 9.56 a.m. l.m.t. I set off $37^{\circ}39'$ on the lat. arc, and $18^{\circ}44'30''$ N. on the dec. arc, and determine a meridian at the corner of secs. 25, 26, 35 and 36.

Thence I run,

N. $89^{\circ}46'$ E. on random line bet. secs. 25 and 36.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.16 Intersect the E. bdy. of the township, 12 lks. S. of the cor. of secs. 25, 30, 31 and 36, heretofore described.

Thence, S. $89^{\circ}41'$ W. on true line bet. secs. 25 and 36.

Over rolling mesa surface, through very dense cedar and pinon timber.

5.00 Leave timber, enter grass flat, heading from N. about 30.00 chs. drawing S.

13.00 Leave same, enter cedar and pinon. N. & S.

20.00 N. end of grass opening, about 5.00 chs. wide, extends S. to the S. bdy. of the tp.

31.00 N. end of grass opening or swale, 5.00 chs. wide, extends S. to S. bdy. of the Tp. An old dim wagon trail, between Monticello-Bluff road, and Montezuma Canon. N. & S.

40.08 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor. with brass cap, marked

S 25
S 36
1912

from which, a pinon, 18 ins. in diam., brs. S. 19° E. 24 lks. dist marked, $\frac{1}{4}$ S 36 S T

A cedar, 12 ins. in dia., brs. N. $52^{\circ}30'$ W. 24 lks. dist. marked, $\frac{1}{4}$ S 25 S T

80.16 The corner of secs. 25, 26, 35 and 36.

Subdivision of T.36 S.R.23 E.

Chains.

Land, rolling timbered mesa.
 Soil, loose sandy bench loam. 1st, rate if irrigated.
 Timber, dense cedar and pinon, about 70.00 chs.
 Open grassy flats, about 10.00 chs.
 Grazing, good on grass flats. balance fair.
 Note. I only ran one mile this day, and early in forenoon.
 No noon lat. taken. July 29, 1912.

July 30: At 9h. 15m. a.m. l.m.t. I set off $37^{\circ}39'$ on the lat. arc, and $18^{\circ}31'$ N. on the dec. arc, and determine a meridian at the corner of secs. 25, 26, 35 and 36.

Then, N. $0^{\circ}01'$ W. bet. secs. 25 and 26.

Over slope of mesa, gradually descending, through dense cedar and pinon.

7.00 Canon gulch, dry, cse. S. 60° W. Several small springs, 3 or 4 chs. down the gulch. Water clear and cool. Grad. asc.

40.00 Set an iron post 3 ft. long, 1 in. in diam. 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor. with brass cap marked

$\frac{1}{4}$ S 26	S 25
	I912

from which, a cedar, 8 ins. in diam. brs. N. 34° E. 40 lks. dist. marked, $\frac{1}{4}$ S 25 B T

A cedar, 18 ins. in diam. brs. N. 78° W. 34 lks. dist. marked, $\frac{1}{4}$ S 26 B T

56.00 Remains of a prehistoric mesa ruin on line.

80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground, for the cor. of secs. 23, 24, 25 and 26, with brass cap marked

T 36 S | R 23 E
S 23 | S 24
S 26 | S 25
I912

from which, a pinon, 6 ins. in diam. brs. N. $61^{\circ}30'$ E. 22 lks. marked, T 36 S R 23 E S 24 B T

A pinon, 7 ins. in diam., brs. S. $9^{\circ}45'$ E 24 lks. dist. marked, T 36 S R 23 E S 25 B T

A pinon, 9 ins. in diam. brs. S. $7^{\circ}45'$ W 22 lks. dist. marked, T 36 S R 23 E S 26 B T

Subdivision of T 36 S.R.23 E.

Chains.

A cedar, 10 in. in diam. brs. N. $26^{\circ}W$ 25 lks. dist.
marked, T 36 S R 23 E S 23 B T.

Land, rolling and broken.

Soil, loose rich bench sand, and stony gulch sides.

Timber, dense cedar and pinon. Scant grazing. At this cor. I set off $18^{\circ}29'N.$ on the dec. arc. at apparent noon, and observe the sun on the meridian, lat. arc. $37^{\circ}40'$. About correct.

Thence, I run

N. $89^{\circ}41'E.$ on random line bet. secs. 24 and 25.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

✓ 80.14 Intersect the E. bdy of the township, 2 lks. S. of the cor. of secs. 19, 24, 25 and 30, heretofore described.

Thence, S. $89^{\circ}40'W.$ on true line bet. secs. 24 and 25.

Descending gradually through very dense cedar and pinon.

II.00 Edge of gulch. Over rim rock 10 ft. high. desc. abruptly.

I5.00 Bottom of gulch. Dry. 90 ft. below rim of mesa. cse. of gulch, N. Asc. steep W side of gulch.

I9.50 Rocky point of spur, 50 ft. above gulch. Point projects N. Steep descent therefrom.

22.50 Gulch, dry. cse. N. $35^{\circ}E.$ Small spring of good water on line. asc. abruptly, 150 ft.

30.00 W. edge of gulch, over perpendicular ledge, 50 ft. high, to mesa. Ledges bear about N & S.

About 4.00 chs. S. of this point is a small cliff dwelling in a fair state of preservation.

✓ 40.07 Set an iron post 3 ft. long, 1 in. in diam. 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor. with brass cap marked

$\frac{1}{4}$
S 24
S 25
1912

from which, a pinon, 6 ins. in diam., brs. S $24^{\circ}W$ 38 lks. dist. marked, $\frac{1}{4}$ S 25 B T.

A cedar, 24 ins. in diam., brs. N. $47^{\circ}W$ 15 lks. dist.

marked, $\frac{1}{4}$ S 24 B T

60.00 Dim wagon trail, bet. Montezuma canon and Monticello.

Bluff stage road. N. $20^{\circ}E$ & S $20^{\circ}W.$

Subdivision of T.36 S.R.23 E.

Chains.
80.14

The corner of secs.23,24,25 and 26.

Land, rolling, 50.00 chs. Broken 30.00 chs.

Soil, rich bench sandy loam, and broken gulch sides. 1st, to poor 4th, rate.

Timber, cedar and pinon, dense growth. Scant grazing.

July 30, 1912.

Aug. 3rd, 1912 at my camp near the center of sec.34 T 35 S.R.23 E. at 3h.p.m.l.m.t. I set off $37^{\circ}43'30''$ On the lat. arc, and $17^{\circ}27'00''$ N. on the dec.arc and determine a mer. with the solar. Marking the line by a small object $\frac{1}{2}$ mile N. At 10h.43m.p.m.l.m.t. at the same point, I observe Polaris at eastern elongation, taking four sights. Two with the telescope in direct position, and two in reversed position, and mark the line thus determined, by driving a small wooden peg in the ground, about 10 chs. N. of my transit station, leaving the tripods in position for the night.

August 4th, at 8h.30m. I lay off the azimuth of Polaris $1^{\circ}27'30''$ to the west, and find the meridian thus obtained falls on the point determined by my solar observation at 3:p.m. yesterday.

At the same station at 9h.15m.a.m.l.m.t. with the lat. arc, set at $37^{\circ}43'30''$ and the dec.arc set at $17^{\circ}14'30''$ N. I find the meridian thus secured, falls on the meridian determined by my Polaris observation.

The instrument having been tested for level and collimation errors and found free of any, I conclude it is in satisfactory adjustment in all its parts.

For description of the instrument and test of tape, see Book J of this Group.

On account of clouds and other interfering conditions, it is impossible for me to take daily observations for latitude, but tests on backsights on lines run, showed the lat. and dec. arcs to be at all times in adjustment, both by am, and p.m. observations.

Subdivision of T.56 S.R.26 E.

Chains.

Aug, 6,: At 10h.06m.a.m.l.m.t. I set off $37^{\circ}40'$ on the lat.arc, and $16^{\circ}42'$ N.on the dec.arc, and determine a meridian with the solar at the corner of secs.23,24, 25 and 26.

Thence I run

N. $0^{\circ}.01'$ W.betsecs.23 and 24.

Over rolling mesa surface, through very dense cedar and pinon timber.Grad.desc.

40.00 Set an iron post 3 ft.long, 1 in.in diam.24 ins.in the ground, for the $\frac{1}{4}$ sec.cor.with brass cap marked

$\frac{1}{4}$	S 23	S 24
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I9I2

from which,a cedar,16 in.in diam.brs.N. 60° E.25 lks.dist. marked, $\frac{1}{4}$ S 24 B T

A cedar,18 in.in diam,brs.N. 26° W.8 lks.dist.mkd. $\frac{1}{4}$ S 23 BT Desc.abruptly,75 ft.

55.00 Canon Gulch,dry,cse.S. 70° W.Asc.abruptly over broken side.

64.00 N.rim of canon,brs.E.&W.100 ft.above gulch.grad.asc.

70.50 Old wagon trail,very dim.E & W.

80.00 Set an iron post 3 ft.long,2 ins.in diam.24 ins.in the ground,for the corner of secs.13,14,23 and 24.with a brass cap marked

T 36	S R 23 E
S 14	S 13
S 23	S 24

I9I2

from which,a pinon,6 in.in diam.brs.N. $55^{\circ}15'$ E.18 lks.dist. marked,T 36 S R 23 E S 13 B T

A pinon,10 in.in diam.brs.S 64° E.78 lks.dist. marked,T 36 S R 23 E S 24 B T

A pinon,10 in.in diam.brs.S. 40° W.105 lks.dist. marked,T 36 S R 23 E S 23 B T

A pinon,7 ins.in diam.brs.N. 27° W.27 lks.dist. marked,T 36 S R 23 E S 14 B T

Land,broken mesa surface.

Soil,sandy loam, and stony.2nd,to poor 4th,rate.

Timber, cedar and pinon pine.

Subdivision of T.36 S.R.23 E.

- Chains. N. $89^{\circ}40'$ E.on random line,betsecs.I3 and 24.
- 40.00 Set temp. $\frac{1}{4}$ sec.cor.
- ✓ 80.18 Intersect the E.bdy.of the Tp.I4 lks.N.of the cor.of secs.I3,I8,I9 and 24, heretofore described.
Thence, S. $89^{\circ}46'$ W.on true line betsecs.I3 and 24.
Across S end of high point in western part of Montezuma Canon.This is the southern part of a high ridge,whose course is about SE and NW.about 200 ft.above the main canon, and is a sandstone formation with perpendicular ledges nearly all around,from 20 to 80 ft.high.The table rock on top is covered with a thin coating of soil, and a scattered growth of scrub cedar and pinon.
- I5.25 Top of ledge 50 ft.perpendicular brs.N. 35° E.&S. 70° E. At W.edge of table.
Aug.6: At this point I set off $16^{\circ}40'$ N.on the dec.arc, and at apparent noon, observe the sun on the meridian.
The lat.arc reads, $37^{\circ}40'30''$, which shows the instrumental lat.to be sufficiently correct.
- 40.09 Set an iron post 3 ft.long, 1 in.in diam. 24 ins.in the ground,for the $\frac{1}{4}$ sec.cor.with brass cap,marked,
- | |
|---------------|
| $\frac{1}{4}$ |
| S I3 |
| <u>S 24</u> |
| 1912 |
- from which,a sandstone boulder,20 X 15 X 10 ft.on which I mark an X S. 50° E. 30 lks.dist.B 0 marked near the cross.
A cedar,8 ins.in diam.brs.N. 30° W. 10 lks.dist.
marked, $\frac{1}{4}$ S I3 B T
- 40.25 Wash,dry,in canon.30 lks.wide,10 ft.deep cse.SE.asc.75 ft.Up W.side of canon.
- 60.00 Top of rim rock.Ledge 40 ft.high.brs.N&S.thence over mesa.
- ✓ 80.18 The cor.of secs.I3,I4,23 and 24.
Land,broken.
Soil,stony poor 2nd,to 4th,rate.
Scat.scrub cedar & pinon.
Scant grazing.

August 6th,1912.

Subdivision of T.36 S.R.25 E.

Chains.

August 9: At 9h.25m.a.m.l.m.t. I set off $37^{\circ}40'30''$ on the lat.arc, and $15^{\circ}51'N.$ on the dec.arc, and determine a meridian with the solar at the cor.of secs.I3,I4,23 and 24. Thence, N. $0^{\circ}01'W.$ bet secs,I3 and I4.

Ascend gradually through very dense cedar and pinon.

- 7.00 Desc.100 ft. from timbered mesa into canon.
- 22.50 Canon wash,dry,10 ft.wide,6 ft.deep.cse.S. $70^{\circ}E.$ Asc.steep broken canon side.
- 40.00 Top of spur from W. Set an iron post,3 ft.long,1 in.in diam,in mound of stone and earth, on solid bed rock, for the $\frac{1}{4}$ sec.cor.with brass cap marked

$\frac{1}{4}$	S I4	S I3
I9I2		

from which,a pinon,10 in.in diam.,brs.N. $58^{\circ}E$ 31 lks. marked, $\frac{1}{4}$ S I3 B T

A cedar,6 in.in diam.brs.N. $85^{\circ}W.$ 28 lks.dist. marked, $\frac{1}{4}$ S I4 B T

- 41.00 Desc.abruptly into canon.
- 68.50 Canon wash,dry,75 ft.below last point.Wash 15 lks.wide, 6 ft.deep.cse.SE.Asc.SE slope.
- 80.00 Set an iron post 3 ft.long,2 ins.,in diam.24 ins.in the ground for the cor.of secs.II,I2,I3 and I4,with a brass cap marked

T 36 S	R 23 E
S II	S I2
S I4	S I3
I9I2	

from which,a pinon,8 in.in diam.brs.N. $38^{\circ}30'E$ 48 lks. marked,T 36 S R 23 E S I2 B T

A pinon,6 ins.in diam.brs.S. $21^{\circ}E.$ 46 lks.dist. marked,T 36 S R 23 E S I3 B T

A pinon,12 ins.in diam.,brs.S. $62^{\circ}W.$ 56 lks.dist. marked,T 36 S R 23 E S I4 B T

A cedar,14 ins.in diam.brs.N. $29^{\circ}W.$ 132 lks.dist. marked,T 36 S R 23 E S II B T

Land,broken canon side.

Soil,stony,poor 4th,rate.Cedar & pinon timber

Subdivision of T.36 S.R 23 E.

Chains.	Thence N. $89^{\circ}46'$ E. on random line bet. secs. I2 and I3.
40.00	Set temp. $\frac{1}{4}$ sec.cor.
80.22	Intersect the E.bdy.of the Tp. 7 lks.N. of the cor.of secs. 7, I2, I3 and I8, heretofore described. Thence S. $89^{\circ}49'$ W. on true line bet. secs. I2 and I3. Over broken surface, low sharp ridges and deep washes draining N.dense scrub cedar and pinon. Gradually ascending.
40.II	Set an iron post 3 ft.long, 1 in.in diam. $\frac{1}{4}$ ins.in mound of stone and earth, on bed rock, for the $\frac{1}{4}$ sec.cor.with brass cap marked
	$\frac{1}{4}$ S I2 S I3 I9I2
	from which, a cedar, 20 ins.in diam.brs. S. $35^{\circ}W.$ 41 lks.dist. marked, $\frac{1}{4}$ S I3 B T
	N.
	A cedar, I2 ins.in diam.brs, $41^{\circ}30'W.$ 44 lks.dist. marked, $\frac{1}{4}$ S I2 B T Aug. 9.
	At this corner at apparent noon, I set off $15^{\circ}49'$ on the dec.arc, and observed the sun on the meridian. The lat. observed, is $37^{\circ}41'30''$ which is correct.
46.00	Enter drain.dry,cse, N. $60^{\circ}E.$ Timber becomes scattered.
52.60	Leave drai,near head.Asc. low ridge, over huge sandstone boulders, and washed barren broken surface.
68.00	Top of ascent,to saddle connecting the high table ridge to the SE.with the main mesa W.of Devil Canon.
	General course of ridge,NW.to S. $60^{\circ}E.$ grad.desc.over bad land and broken surface.
80.22	The cor.of secs. II.I2, I3 and I4. Land,broken. Soil,poor,stony 4th,rate. Timber,dense to scattered.scrub cedar and pinon. Scant grazing.

Subdivision of T.36 S.R.25 E.

Chains.

At 2h.10m.p.m.l.m.t. I set off $37^{\circ}41'30''$ on the lat.arc and $15^{\circ}47'30''$ N.on the dec.arc and determine a meridian with the solar at the cor of secs.II,I2,I3 and I4.

Thence N. $0^{\circ}01'4$.bet,secs.II and I2.

Ascending to canon head over broken curfase,through scat. cedar and pinon.

16.50 Canon gulch,dry,cse.S. 10° W.Asc.becomes steep.

18.50 At S.edge of mesa.on sandstone ledge 20 ft.high.bearns NW.and SE. Thence,over exposed bed rock and thin sand surface,gradually ascending.

32.50 At NE.edge of table land.on Sandstone apex.from which a perpendicular descent of 75 ft.over ledge.thence steep broken descent.through dense cedar and pinon.

40.00 Set an iron post 3 ft.long, 1 in.in diam.24 ins.in the earth and stone on bed rock,for the $\frac{1}{4}$ sec.cor.with brass cap,marked

$\frac{1}{4}$	S II		S I2
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I9I2

from which,a pinon,12 ins.in diam.brs.N. 85° E.60 lks.dist. marked, $\frac{1}{4}$ S I2 B T

A cedar,10 in.in diam.,brs.S. 35° W.34 lks.dist.

marked, $\frac{1}{4}$ S II B T

Thence,grad.desc.from $\frac{1}{4}$ sec.cor.

80.00 75 ft.below $\frac{1}{4}$ sec.cor.Set an iron post 3 ft.long,2 ins. in diam.24 ins.in earth and stone for the cor.of secs. I,2,II and I2.with brass cap marked

T 36	S	R 23	E
S 2'	|	S I'	
<hr/>			
S II.		S I2'	

I9I2

from which,a pinon.7 in.in diam.brs.N. $17^{\circ}30'$ E.60 lks. marked,T 36 S R 23 E S I B T

A cedar,8 ins.in diam.brs.S. 43° E.13 lks.dist.

marked,T 36 S R 23 E S I2 B T

A pinon,7 ins.,in diam.,brs.S. $81^{\circ}30'$ W.48 lks.dist.

marked,T 36 S R 23 E S II B T

A cedar,20 ins.in diam.,brs.N 62° W.70 lks.dist.

Subdivision of T 36 S.R.23 E.

Chains.

marked, T 36 S.R.23 E S 2 B T

Land broken.

Soil, poor 4th rate and stony.

Timber, cedar and pinon.

Scant grazing.

August 9th, 1912

August 12: At 1h.35m.p.m.l.m.t. I set off $37^{\circ}42'30''$ on the lat.arc; $14^{\circ}54'N.$ on the dec.arc, and determine a meridian at the cor.of secs.I,2,II and I2.

Thence, N. $89^{\circ}49'E.$ on random line, bet.secs.I and I2.

40.00

Set temp. $\frac{1}{4}$ sec.cor.

80.20

Intersect the F.bdy. of Tp, 2 lks.N. of the cor.of secs. I,6,7 and I2, heretofore described.

Thence S. $89^{\circ}50'W.$ on true line, bet.secs.I and I2,

Descend gradually the broken slope into Devil Canon, through scat.cedar and pinon.

35.50

Devil Canon Wash. 30 lks.wide, dry, cse.S. A spring of good water of small flow, brs.up canon, about 7.00 chs.N.

40.10

Set an iron post 3 ft.long, 1 in.in diam., 24 ins.in earth and stone, for the $\frac{1}{4}$ sec.cor.with brass cap, marked

$$\begin{array}{c} \frac{1}{4} \\ \text{S I } \checkmark \\ \hline \text{S I2 } \checkmark \\ \text{I912} \end{array}$$

from which, a pinon, 8 ins.in diam. brs. N. $9^{\circ}30'W.$ 30 lks.dist.

marked, $\frac{1}{4}$ S I B T

A cedar, 16 in.in diam. brs., S. $53^{\circ}E.$ 30 lks.dist.

marked, $\frac{1}{4}$ S I2 B T

thence along foot of N.slope of Devil Canon.

55.00

Asc.N.E.Slope.

80.20

The corner of secs.I,2,II and I2.

Land, broken.

Soil, poor 4th,rate.barron and stony.

Timber, scrub cedar and pinon.

Grazing scant.

August 12, 1912.

Subdivision of T.36 S.R.23 E.

- Chains. August 13, At 2h.^{05m}.p.m.l.m.t. I set off $37^{\circ}42'30''$ on the lat. arc and $14^{\circ}36'N.$ on the dec.arc, and determine a meridian at the corner of secs.I,2,II and II. Thence N. $0^{\circ}01'W.$ on true line bet.secs.I and 2. Over broken canon surface, descending abruptly 75 ft. through dense cedar and pinon.
- 9.50 Deep dry wash; 30 lks.wide, course, S. $70^{\circ}E.$ leads into Devil Canon. Ascend steep south easterly divide bet. Indian Canon and Devil Canon. Very broken.
- 31.50 Intersect the 7th, Standard Parallel S.25.82 chs.E. of the stand.cor.of secs.35 and 36T.35 S.R.23 E.A 3.in.iron post marked and witnessed as described by the Surveyor General. At point of intersection I set an iron post 3' ft.long, 2 in.in diam.24 ins.in the ground, for the closing cor.of secs.I and 2 with a brass cap marked
 T 35 S R 23 E
 S 35 S 36
 C.C
 S 2 S I
 T 36 S
 1912
- from which,a sandstone boulder,marked X and BO bears, S. $48^{\circ}E.$ 23 lks.dist.
- A sandstone boulder, 10 X 4 X 3 ft.marked X and B O bears, S $35^{\circ}W.$ 15 lks.dist.
- Land,broken stony surface.
- Soil,poor barren 4th,rate.
- Timber,scrub cedar and pinion.
- Scant grazing.

August, 13th, 1912.

Subdivision of T.36 S.R.23 E.

Chains.	<p>July, 27: At 8h. 16 a.m.l.m.t. I set off $37^{\circ}38'$ on the lat. arc, and $19^{\circ}14'N.$ on the dec. arc, and determine a meridian, at the corner of secs. 2, 3, 34 and 35, set by Jos. C. Thoma U.S. Surveyor under this Group, July 9, 1912.</p> <p>Thence $N.6^{\circ}01'W.$ bet. secs. 34 and 35. Over N.E. slope of timbered mesa. Gradual descent.</p>
23.00	<p>Leave mesa, over sandstone ledge, into an arm of Alkali Canon. Rim rock about 15 ft. high, brs. N.W. and S.E. Desc. abruptly over broken canon side. 150 ft.</p>
40.00	<p>Set an iron post, 3 ft. long, 1 in. in diam. 24 ins. in earth and stone, for the $\frac{1}{4}$ sec. cor. with brass cap, marked,</p> <p style="text-align: center;">$\frac{1}{4} S 34 | S 35$</p> <p style="text-align: center;">1912</p> <p>from which, a pinon, 5 ins. in diam., brs. S. $9^{\circ}E.$ 32 lks. dist. marked, $\frac{1}{4} S 35$ B.T.</p> <p>A pinon, 5 ins. in diam., brs. S. $18^{\circ}30'W.$ 30 lks. dist. Marked, $\frac{1}{4} S 34$ B.T.</p> <p>Note. S. $70^{\circ}30'W.$ 21.12 chs. there is a natural bridge, across a small canon a few rods from its head. At the bearing and distance noted, I cut a small cross on the sandstone, on the south end of the girder.</p> <p>This bridge is of sandstone, and of a mean span of about 95 ft. and is about 35 ft. from the bottom of the gulch to the lower side of the girder, which is about 9 ft. in thickness, and averaging 36 ft. in width on top.</p> <p>The surface is quite smooth, and is used by stock, in their trail across the canon.</p> <p>There is a large clear spring in the gulch under the S. end of the bridge, and some remains of a cliff dwelling in the caves a few rods above the arch.</p> <p>There are some excellent specimens of pictographs, cut on a large sandstone under the S. part of the arch.</p>
55.00	<p>Base of descent, leave cedar and pinon, enter dense high sage brush. over canon bottom.</p>
58.00	<p>Wash, dry, in canon bottom. 20 lks. wide, 15 ft. deep. cse. SE.</p>

Subdivision of T.36 S.R.23 E.

- Chains.
73.00 Alkali Wash,in bottom of Alkali Canon.20 lks.wide,15 ft. deep.cse.S.35°E.
- 80.00 Set an iron post 3 ft.long,2 ins.in diam.,24 ins.in the ground,for the cor.of secs.26,27,34 and 35,with brass brass cap marked

T 36 S	R 23 E
S 27	S 26
S 34	S 35

I912

dig pits,18 X 18 X 12 ins.in each sec.5 $\frac{1}{2}$ ft.dist.and raise a mound of earth,4 ft.base,2 ft.high W.of the cor. Land,rolling and broken.

Soil,loose sand wash,in canon,thin surface sand on mesa. 2nd,to poor 4th rate.

Timber,dense cedar and pinon,55.00 chs.

Heavy dense sage brush growth,25.00 chs.in canon.

Scant grazing.

July 27,1912.

Thence,N.89°46'E.on random,betsecs.26 and 35..

40.00 Set temp. $\frac{1}{4}$ sec.cor.

✓ 79.90 Fall 16 lks.N.of the cor.of secs.25,26,35 and 36.

Thence,S.89°53'W.on true line betsecs.26 and 35.

Over broken mesa surface,through very dense cedar and pinon.

12.50 Gulch,10 lks.wide,spring of stagnant water on line. gradual ascent.

✓ 39.95 Set an iron post 3 ft.long,1 in.in diam.,24 ins.in the ground,for the $\frac{1}{4}$ sec.cor.with brass cap marked

$\frac{1}{4}$	S 26
	S 35

I912

from which,a cedar,5 ins.in diam.,brs.S.10°E.35 lks.dist. marked, $\frac{1}{4}$ S 35 B T

A cedar,12 ins.in diam.,brs.N.10°W.70 lks.dist. marked, $\frac{1}{4}$ S 26 B T

Subdivision of T.36 S.R.23 E.

- Chains. W.edge of mesa.Desc.abruptly into Alkali Canon. Over broken, canon sides.
- 68.50 Base of descent, 60 ft. below mesa. Leave timber, thence across canon bottom through dense sage brush.
- 75.00 The corner of secs. 26, 27, 34 and 35.
- 79.90 Land, rolling and broken.
Soil, Sandy bench loam and loose washed canon bottom sand, 2nd, to poor 4th. rate.
Timber, cedar and pinon, 75.00 chs.
Undergrowth, dense sage brush, about 5.00 chs.
Scant grazing.

July, 27th, 1912.

- August 2: At 9h.a.m.l.m.t. I set off $37^{\circ}39'$ on the lat. arc, and $17^{\circ}46'$ N. on the dec. arc, and determine a meridian, at the cor. of secs. 26, 27, 34 and 35.
Thence N. $0^{\circ}01'$ W. bet. secs. 26 and 27.
Over canon bottom surface, through dense sage brush.
- .50 Wash, from NE. dry. 10 lks. wide, 7 ft. deep. cse. SW.
- 14.00 Leave dense sage brush, brs. N. 25° W. and E. Begin ascent of spur from NE. Over huge boulders and broken surface through dense cedar and pinon.
- 38.00 Along, canon side on W. slope from Mesa.
- 40.00 Set an iron post 3 ft. long, 1 in. in diam., in mound of stone and earth, on bed rock, for the $\frac{1}{4}$ sec. cor. with a brass cap marked .

$\frac{1}{4}$	S 27		S 26
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1912.

from which, a cedar, 12 ins. in diam. brs., N. 70° E. 18 lks. dist. marked, $\frac{1}{4}$ S 26 B T

A cedar, 12 ins. in diam. brs West 9 lks. dist. marked, $\frac{1}{4}$ S 27 B T

- 64.00 Gulch, dry, 15 lks. wide, 4 ft. deep. cse SW. About 12.00 chs. up this gulch about NE. is a spring, of good water. Small flow.

Subdivision of T.36 S.R.23 E.

- Chains.
70.00 Point of mesa, from the E.desc.along the W slope of mesa,
over very broken surface.
- 80.00 Set an iron post 3 ft.long, 2 ins.in diam. 24 ins.in mound
of stone and earth, on stone bed rock, for the cor.of
secs.22,23,26 and 27.with brass cap marked,

T 36 S	R 23 E
S 22	S 23
S 27	S 26

1912:

- from which, a pinon, 8 ins.in diam.brs., N.41°30'E.36 lks.
marked, T 36 S R 23 E S 23 B T
- A sandstone boulder 6 X 8 X 5 ft.brs. S.18°30'E.35 lks.dist.
marked, X and B O
- A pinon, 10 in.in diam.brs. S.56°30'W.57 lks.dist.
marked, T 36 S R 23 E S 27 B T
- A pinon, 7 in.in diam.brs. N.52°30'W.64 lks.dist.m
marked, T 36 S R 23 E S 22 B T
- Land, broken.
- Soil, barren and stony.
- Scat.growth of scrub cedar and pinon.
- Scant grazing.Dense.sage brush, 14.00 chs.

Aug. 2nd, 1912.

- Thence I run,
N.89°53'E.on random line,bet.secs.23 and 26.
- 40.00 Set temp. $\frac{1}{4}$ sec.cor.
- 80.00 Intersect the N & S.line, 2 lks.S.of the cor.of secs.
23,24,25 and 26.
- Thence S. 89°52'W.on true line,bet.secs.23 and 26.
- Over rolling mesa,draining SW,gradually descending
through very dense cedar and pinon.
- 34.00 Old mesa ruins,br.N.about 3.00 chs.
- 40.00 Set an iron post 3 ft.long, 1 in.in diam. 24 ins.in the
ground,for the $\frac{1}{4}$ sec.cor.with brass cap,marked

$\frac{1}{2}$	
S 23	
S 26	6

1912

Subdivision of T 36 S.R.23 E.

Chains.	from which, a pinon, 10 in. in diam., brs. S.24°E. 25 lks. dist. marked, $\frac{1}{4}$ S 26 B T
	A pinon, 7 ins. in diam. brs. North, 17 lks. dist. marked, $\frac{1}{4}$ S 23 B T
	Aug: 2: At this cor. at apparent noon, I set off 17°44' N. on the dec. arc, and observe the sun on the meridian. The lat. so observed is 37°40' which is about correct.
54.00	Old mesa ruin on line.
78.00	W. edge of mesa, brs. N&S. Desc. abruptly 65 ft. into an arm of Alkali Canon, from the NE.
80.00	The cor. of secs. 22, 23, 26 and 27. Land, rolling and broken. Soil, sandy bench loam, on mesa. 2nd, rate. Timber, cedar and pinon.

August 2nd, 1912

August 8: At 8h.35m.a.m.l.m.t. I set off 37°40' on the lat. arc, and 16°09' N. on the dec. arc, and determine a meridian at the cor. of secs. 22, 23, 26 and 27.

Thence N.0°01' W. bet. secs. 22 and 23.

Along canon bottom. through cedar and pinon. over broken surface.

3.75	Canon wash, 20 lks. wide, cse. SW. dry. A good spring, up the canon, N. 15°E. 30.00 chs.
36.50	ascend from canon, over Canon side, very broken surface. Ledge of rim rock, 50 ft. high. N. 70°E. and S. 30°W. over rolling mesa, from canon ledges.
40.00	Set an iron post 3 ft. long, 1 in. in diam. 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor. with brass cap, marked

$\frac{1}{4}$ S 22 | S 23

I912

from which, a pinon, 7 ins. in diam. brs. S. 30°E. 24 lks. dist. marked, $\frac{1}{4}$ S 23 B T

A cedar, 10 in. in diam., brs. N. 16°15' W. 20 lks. dist. marked, $\frac{1}{4}$ S 22 B T.

Subdivision of T.36 S.R.23 E.

Chains.
80.00 Set an iron post 3 ft.long, 2 ins., in diam., 24 ins. in the ground, for the cor.of secs.I4,I5,22 and 23. with a brass cap marked

T 36 S	R23 E
S I5'	S I4
S 22'	S 23
I9I2	

from which, a pinon, 6 ins. in diam.brs.N.21°30'E.36 lks. marked, T 36 S R 23 E S I4 B T

A cedar, 7 ins. in diam., brs.S.21°30'E.36 lks.dist. marked, T 36 S R 23 E S 23 B T

A pinon, 7 ins. in diam.brs.S.32°W.32 lks.dist. marked, T 36 S R 23 E S 22 B T

A pinon, 4 ins. in diam.brs.N 34°30'W.45 lks.dist. marked, T 36 S R 23 E S I5 B T

Land, broken.

Soil, stony and poor 4th, rate, 36.50 chs. balance loose bench sand, 2nd, rate.

Timber, cedar and pinon.

Scant grazing.

Aug.8: At the cor.of secs.I4,I5,22 and 23. I set off 37°41' on the lat.arc, and 16°05'N.on the dec.arc at 1h.35m.p.m.l.m.t. and determine a meridian, with the solar. Thence, I run. N.89°52'E. on random line, bet.secs.I4 and 23.

40.00 Set temp. sec.cor.

79.98 Intersect the N.& S.line, 7 lks.N. of the cor.of secs. I3. I4, 23 and 24.

Thence. S.89°55'W.on true line, bet.secs.I4 and 23.

Over rolling,surface,draining SW.through very dense cedar and pinon.

21.50 Old dim wagon trail,bet.Montezuma Canon and Bluff-Monticello Stage road.NW&S.E.

39.99 Set an iron post 3 ft.long, 1 in.in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec.cor.with brass cap marked

Subdivision of T. 36 S.R. 23 E.

Chains.

$$\begin{array}{r} \frac{1}{4} \\ S \text{ I4} \\ \hline S \text{ 23} \end{array}$$

I9I2

- from which, a cedar, 7 in. in diam. brs. N. 20° E. 30 lks. dist. marked, $\frac{1}{4}$ S I4 B T
- A cedar, 12 ins. in diam., brs. S 34° W. 59 lks. dist. marked, $\frac{1}{4}$ S 23 B T
- desc. grad.
- 54.00 Wash, dry, 20 lks. wide, drains, S. 20° W. asc.
- 65.00 Point of mesa, projects. S. desc.
- 69.00 Head of canon, 1.00 ch. wide, cse. S. 15° W. grad. asc.
- 79.98 The cor. of secs. I4, I5, 22 and 23.
Land, broken and rolling.
Soil, sandy loam. and stony. 2nd, to 4th, rate.
Timber, dense cedar and pinon.
Scant grazing.

August, 8th, 1912.

August 10: At 8 a.m. I set off 37° 40' 30" on the lat. arc, and 15° 35' N. on the dec. arc, and determine a meridian at the cor. of secs. I4, I5, 22 and 23.

Thence, N. 6° 01' W. bet. secs. I4 and I5.

Through dense cedar and pinon, over rolling surface; grad. ascending.

40.00 Set an iron post 3 ft. long, 1 in. in diam. 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor. with brass cap marked

$$\begin{array}{r} \frac{1}{4} \text{ S I5} \end{array} \mid \begin{array}{r} \text{S. I4} \end{array}$$

I9I2

from which, a cedar, 6 in. in diam. brs. S. 19° E. 47 lks. dist. marked, $\frac{1}{4}$ S I4 B T

A cedar, 20 ins. in diam. brs. West, 13 lks. dist.

marked, $\frac{1}{4}$ S I5 B T.

80.00 Set an iron post 3 ft. long, 2 ins., in diam, 24 ins. in the ground, for the cor. of secs. I0, II, I4 and I5. with brass cap, marked

Subdivision of T.36 S.R.23 E.

Chains.

T 36	S	R 23	E
S IO		S II	
S I5		S I4	

1912

from which,a cedar,I5 ins.in diam.brs.N.25°E 162 lks.dist.
marked,T 36 S R 23 E S II B T

A cedar,24 ins.in diam.,brs.S.20°E.375 lks.dist.
marked,T 36 S R 23 E S I4 B T

A cedar,20 ins.in diam.brs,S.56°W.2I5 lks.dist.
marked,T 36 S R 23 E S I5 B T

A cedar,I8 ins.in diam.,brs.N.46°W.200 lks.dist.
marked,T 36 S R 23 E S I0 B T

Land,rolling.

Soil,rich bench sandy loam.Ist.rate if irrigated.

Timber;cedar and pinon,thick growth.

Scant grazing.

August 10,1912.

h.05m.

August 17:At 9;a.m.l.m.t.I set off 37°41'30" on the lat.
arc, and I3°25'N.on the dec.arc, and determined a meridian
at the cor.of secs.I0,II,I4 and I5.

Thence,I run

N.89°55'E.on random line,bet secs.II and I4.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

80.06 Intersect the N & S line,25 lks.N.of the cor.of secs.
II,I2,I3 and I4.

Thence,N.89°54'W.on true line betsecs.II and I4.

Over broken surface,through dense cedar and pinon.desc.

2.00 Wash,dry,cse.S.I5 lks.wide.asc.

4.00 Point of spur from mesa to the N.projects S.desc.

9.00 Canon wash,20 lks.wide,dry,cse.SE.ascend abruptly over
broken canon side.

14.00 Top of ascent,at E.edge of mesa.brs.NW and SE.

40.03 Set an iron post 3 ft.long,1 in.in diam.24 ins.in the
ground,for the $\frac{1}{4}$ sec.cor.with brass cap,marked

$\frac{1}{4}$	
S I1	
S I4	

1912

Subdivision of T.36 S.R.23 E.

Chains.	from which, a cedar, 9 in. in diam. brs. S. $78^{\circ}30'$ W. 40 lks. dist. marked, $\frac{1}{4}$ S I4 B T
	A cedar, 8 in. in diam. brs. N. $23^{\circ}30'$ W. 79 lks. dist. marked, $\frac{1}{4}$ S II B T
60.00	Leave timber, enter grass flat. brs. N&S. drains. S. small drain near E. edge of opening, drains S.
71.75	Old wagon trail, bet Montezuma Canon and Bluff-Monticello stage road. NW & SE.
80.06	The cor. of secs. I0, II, I4 and I5. Land, rolling and broken. Soil, 1st, rate if irrigated, on mesa, poor 4th, rate in canon. Timber, cedar and pinon, 60.00 chs.
	Note. There is a spring with large flow of water, fairly free of alkali, about 20.00 chs. S. $15^{\circ}E$ of the $\frac{1}{4}$ cor.

August 17, 1912.

	h.05m. August I0: At 9; a.m.l.m.t. I set off $37^{\circ}41'30''$ on the lat. arc and $I5^{\circ}34'N$. on the dec. arc, and determine a meridian with the other solars at the cor. of secs. I0, II, I4 and I5. Thence I run N. $0^{\circ}01'W$. bet. secs. I0 and II. Over rolling, mesa, across grass flat, gradually ascending.
II.00	Old dim wagon trail, brs. NW and SE.
I5.00	Leave grass flat, and enter dense cedar and pinon timber.
40.00	Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor. with brass cap marked

$\frac{1}{4}$ S I0 | S II

1912

	from which, a scrub cedar, 24 ins. in diam. brs. N. $61^{\circ}E$. 44 lks. marked, $\frac{1}{4}$ S II B T.
	A pinon, 8 ins. in diam. brs. West 8 lks. dist. marked, $\frac{1}{4}$ S I0 B T.
73.00	N. edge of mesa. Desc. into canon, over broken sides.
79.40	Wash, dry in canon. I5 lks. wide, cse $S 80^{\circ}E$. I80 ft. below mesa.

Subdivision of T.36 S.R.23 E.

Chains.
80.00

Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground, for the cor. of secs. 2, 3, IO and II. with brass cap, marked

T.36 S		R 23 E
S 3	S 2	
S IO		S II

1912

from which, a pinon, 6 ins. in diam., brs. N. $63^{\circ}30' E$ 87 lks. marked, T 36 S R 23 E S 2 B T

A sandstone boulder, 16 X IO X 7 ft. marked X and B O brs. S. $59^{\circ}45' E$. 65 lks. dist.

A pinon, 7 ins. in diam. brs. S. $75^{\circ}W$. 65 lks. dist. marked, T 36 S R 23 E S IO B T

A pinon, 9 ins. in diam. brs. N. $53^{\circ}W$. 55 lks. dist. marked, T 36 S R 23 E S 3 B T.

Land rolling, 73.00 chs. Broken, 7.00 chs.

Soil, 1st, rate sandy bench loam. 73.00 chs. 4th, rate broken and stony, 7.00 chs.

Scant grazing. Timber, cedar and pinon.

At this corner at apparent noon, I set off $15^{\circ}31'30'' N$. on the dec. arc and observe the sun on the meridian. The resulting lat. is $37^{\circ}42'30''$ which is approximately correct.

August. 10th, 1912.

August 12: At 9h. 55m. a.m. l.m.t. I set off $37^{\circ}42'30''$ on the lat. arc, and $14^{\circ}57\frac{1}{2}N$. on the dec. arc and determine a meridian with the solar, at the cor. of secs. 2, 3, IO & II.

Thence I run,

S. $89^{\circ}54' E$. on random line, bet. secs. 2 and II.

40.00 Set tem. $\frac{1}{4}$ sec. cor.

80. IO Intersect the N. & S. line 37 lks. S. of the cor. of secs. I, 2, II and II.

Thence, S. $89^{\circ}50' W$. on true line, bet. secs. 2 and II.

Gradual asc. over N.E. slope, through scat. cedar and pinon.

40.05 Set an iron post 3 ft. long, 1 in. in diam. in earth and stone, on bed rock, for the $\frac{1}{4}$ sec. cor. with brass cap marked

Subdivision of T.36 S.R.23 E.

Chains.

 $\frac{1}{4}$
 S 2 ✓
 S II
 I9I2

- from which, a cedar, 12 ins. in diam. brs. S. 60° E. 42 lks. dist. marked, $\frac{1}{4}$ S II B T
- A pinon, 10 in. in diam. brs. N. 78° W. 32 lks. dist. marked, $\frac{1}{4}$ S 2 B T
- 46.75 A sandstone boulder, 25 X 15 X 15 ft. on line. desc.
- 57.50 Canon wash, dry, 15 lks. wide, cse. NE. asc. abruptly,
- 65.00 Top of sharp stony ridge from mesa to the N. projects, S. 60. ft. above the last point. Grad. desc. over badly broken surface.
- 80.10 The cor. of secs. 2, 3, 10 and II.
Land, all broken surface.
Soil, canon sides and bottom. poor 4th, rate.
Timber, cedar and pinon.
Scant grazing.

August, 12th, 1912.

August, 14th, At 10h. a.m. l.m.t. I set off $37^{\circ}42'30''$ on the lat. acr, and $14^{\circ}21'N$. on the dec. arc and determine a meridian at the cor. of secs. 2, 3, 10 and II.

Thence, N. $0^{\circ}01'W$. on true line, bet. secs. 2 and 3.

Ascend south westerly slope of mesa.

- 6.00 Top of ascent, of N. side of canon, to S. edge of mesa. brs. N. $10^{\circ}W$. and S. $70^{\circ}E$. grad asc. over and along canon rim.
- 31.92 Intersect the 7th, Standard Parallel, 25.82 chs. E. of the Stand. cor. of secs. 34 and 35. T. 35 S. R. 23. E., an iron post, 3 in. in diam. firmly set, with brass cap, marked and witnessed as described by the surveyor general.

At the point of intersection I set an iron post 3 ft. long 2 in. in diam. 24 ins. in earth and stone, for the closing sec. cor. pft. secs. 2 and 3 with brass cap marked

T 35 S R 23 E
S 34 S 35

C C

S 3 S 2

T 36 S 1912 T 23 E

from which, a pinon. 8 ins. in diam. brs. S. $73^{\circ}E$. 25 lks. dist. marked, T 36 S R 23 E S 2 B T

Subdivision of T.36 S.R.23 E.

Chains.

A cedar, 14 ins. in diam. brs. S $86^{\circ}30'W$. 21 lks. dist.

marked, T 36 S R 23 E S 3 B T.

Land broken stony canon surface.

Soil, poor wash canon sides and barren except for scat.

cedar and pinon. Discontinued work on line before noon.

No lat. observation taken. August 14, 1912.

July 27: At 1h 36m.p.m. 1.m.t. I set off $37^{\circ}38'$ on the lat. arc, and $19^{\circ}10'30''N$. on the dec. arc, and determine a meridian at the cor. of secs. 3, 4, 33 and 34, on the S.bdy. of the Tp. set by Jos. C. Thoma U.S. Surveyor under this group, July 1912.

Thence N. $0^{\circ}02'W$. bet. secs. 33 and 34.

Over rolling mesa, and short sage brush, and scat. cedar and pinon groves. gradually ascending.

40.00 Set an iron post 3 ft. long, 1 in. in diam. 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor., with brass cap, marked

$\frac{1}{4}$ S 33	S 34
1912	

from which, a cedar, 5 ins. in diam. brs. S. $80^{\circ}E$. 13 lks. dist. marked, $\frac{1}{4}$ S 34 B T

A cedar, 5 in. in diam. brs. S. $76^{\circ}W$ 63 lks. dist.marked, $\frac{1}{4}$ S 33 B T

80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground, for the cor. of secs. 27, 28, 33 and 34. with brass cap, marked,

T 36 S	R 23 E
S 28	S 27
S 33	S 34

1912

from which, a cedar, 10 in. in diam. brs. N. $41^{\circ}E$. 54 lks. dist. marked, T 36 S R 23 E S 27 B T

A cedar, 12 ins. in diam. brs. S. $64^{\circ}E$. 117 lks. dist.

marked, T 36 S R 23 E S 34 B T

A cedar, 6 ins. in diam. brs. S. $33^{\circ}W$. 16 lks. dist.

marked, T 36 S R 23 E S 33 B T

A cedar, 14 ins. in diam. brs. N. $31^{\circ}30'W$ 23 lks. dist.

Subdivision of T.36 S.R.23 E.

Chains.

marked, T 36 S R 23 E S 28 B T
 Land, rolling mesa.
 Soil, 1st, rate sandy bench loam.
 Timber, cedar and pinon in patches, scattered.
 Grazing, good.

- Thence, I run
 N.89°46' E. on random line, bet. secs. 27, and 34.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.94 Intersect the N. & S. line, 19 lks. N. of the cor. of secs. 26, 27, 34 and 35.
 Thence, S.89°54' W. on true line, bet. secs. 27 and 34.
 Across Alkali Canon. bottom.
- 1.00 Alkali Wash, 30. lks. wide. 15 ft. deep, dry, cse. S. 20° E.
- 5.00 Begin ascent of steep broken slope from canon to the E rim of mesa. Leave sage brush, N. 20° W. and S.
- 7.75 Top of ascent, over sandstone ledges, N. 20° W. & S. thence over rolling timbered mesa, draining S. into canon.
- 39.97 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground, for the $\frac{1}{4}$ sec. cor. with brass cap marked
- $$\begin{array}{c} \overline{S\ 27} \\ \overline{S\ 34} \\ 1912 \end{array}$$
- from which, a cedar, 12 ins. in diam. brs. S 8° W. 88 lks. dist. marked, S 34 B T
- A cedar, 20 ins. in diam, brs. N. 33° 30' W. 25 lks. dist. marked, S 27 B T
- 60.00 Leave cedar and pinon, enter sage brush flat. brs. N & S.
- 79.94 The corner of secs. 27, 28, 33 and 34.
 Land, broken, 7.75 chs. rolling 72.25 chs.
 Cedar and pinon. 52.25 chs,
 Good grazing, 20.00 chs.

July 27, 1912.

Subdivision of T.36 S.R.23 E.

Chains.

August Ist, At 2h.p.m.l.m.t. I set off $37^{\circ}39'$ on the lat. arc, and $17^{\circ}58'$ N. on the dec. arc, and determine a meridian at the cor. of secs. 27, 28, 33 and 34.
Thence, N. $0^{\circ}02'$ W. bet. secs. 27 and 28.

Over rolling mesa, through very dense cedar and pinon.
Ascend gently.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins in the ground, for the $\frac{1}{4}$ sec. cor. with brass cap, marked

$\frac{1}{4}$	S 28	S 27
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I9I2.

from which, a cedar, 15 ins. in diam. brs. N. 60° E. 28 lks. dist. marked, $\frac{1}{4}$ S 27 B T

A cedar, 12. in. in diam. brs. S. 25° W. 28 lks. dist. marked, $\frac{1}{4}$ S 28 B T

70.00 Grad. desc. on S. slope. of small gulch.

80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground, for the cor. of secs. 21, 22, 27 and 28 with brass cap marked,

T 36	S R 23	E
S 21	S 22	
S 28	S 27	

I9I2

from which, a pinon, 14 ins. in diam. brs. N. 60° E. 70 lks. dist. marked, T 36 S R 23 E S 22 B T

A cedar, 14 ins. in diam. brs. S. 50° E. 21 lks. dist. marked, T 36 S R 23 E S 27 B T

A pinon, 10 in. in diam. brs. S. 65° W. 43 lks. dist. marked, T 36 S R 23 E S 28 B T

A cedar, 14 ins. in diam. brs. N. $62^{\circ}30'$ W. 52 lks. dist. marked, T 36 S R 23 E S 21 B T

Land, gently rolling.

Soil, sandy bench loam, 1st, rate if irrigated, 70.00 chs. Stony and open, 10.00 chs.

Timber, cedar and pinon.

Undergrowth, short sage brush.

August Ist, I9I2.

Subdivision of T. 36 S., R. 23 E.

Chains.

- August 2: At 2h.p.m.; 1. m. t., I set off $37^{\circ} 40'$ on the l lat. arc, and $17^{\circ} 43'$ N. on the decl. arc, and determine a meridian at the cor. of secs. 21, 22, 27 and 28. Thence I run N. $89^{\circ} 54'$ E., on random line, bet. secs. 22 and 27.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.94 Intersect the N. and S. line, 28 lks. N. of the cor. of secs. 22, 23, 26 and 27. Thence, N. $89^{\circ} 54'$ W. on true line bet. secs. 22 and 27. Steep desc. into canon. Through very dense cedar and pinon, over very broken surface, among huge sandstone boulders.
- 2.00 Cabon wash, dry, 10 lks. wide, 6 ft. deep, cse. S. asc. 75 ft.
- 5.50 Top of asc., dn E. rim of mesa point, from N.
- 22.00 At west edge of mesa, on exposed bed rock, underneath which is a cave, 84 ft. at the front, 24 ft. at deepest place, 27 ft. from bottom to under part of cave roof at front. Thers is a clear spring of water seeping through porous sandstone at the northern part of the cave. Steep desc. from cave.
- 25.00 Canon wash, dry, 10 lks. wide, 5 ft. deep, cse. S. asc. abruptly.
- 37.00 Point of mesa, proj. S.
- 39.97 Set an iron post, 3' ft. long, 1 in. in diam., 24 ins. in stone and earth, for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$$\begin{array}{r} \frac{1}{4} \\ S 22 \\ \hline S 27 \end{array}$$

1912

from which, a yellow pine, 24 ins. in diam., brs. N. 25° W., 96 lks. marked, $\frac{1}{4}$ S 22 B T

A cedar, 10 ins. in diam. brs. S. 70° E. 69 lks. dist., mkd.
 $\frac{1}{4}$ S 27 B T

Desc. from cor.

- 42.00 Leave timber, at base of desc., bearing N. 20° W. & S. Thence across A lkali Canon bottom, through dense sage brush.
- 50.00 Alkali Wash, 10 lks. wide, 7 ft. deep, cse. S.E.

Subdivision of T. 36 S., R. 23 E.

Chains.

- 58.00 Leave sage brush, enter scat. cedar and pinon, N. & S. asc.
W. slope of canon, over broken surface.
- 62.00 Top of asc., on rim rock at edge of mesa, brs. N. 70° W. & S.
- 79.94 The cor. of secs. 21, 22, 27 and 28.
Land, broken and rolling.
Soil, poor, 2nd to 4th rate. Washed sand in canon, 16 chs.
Timber, cedar and pinon. Undergrowth, sage brush and some
scrub oak brush on canon sides. Scant grazing.

August 2nd, 1912.

Daniel B. Miller

U. S. Surveyor.

August 7: At 9h 06m, a. m. l. m. t., I set off $37^{\circ} 40'$ N.
on the lat. arc, $16^{\circ} 25'$ N. on the decl. arc, and at
the cor. of secs. 21, 22, 27 and 28, determine the
meridian with the solar.

Thence I run

N. $0^{\circ} 02'$ W., bet. secs. 21 and 22.Asc. over rolling mesa, covered with dense cedar and
pinon timber.

- 3.00 Wash, 20 lks. wide, 10 lks. deep, drains E.
14.00 Top of asc., bears E. and W.; desc. gradually.
- 21.00 Rim of an arm of Alkali Canon, 30 ft. high, bears E. and
W.; desc. abruptly.
- 24.00 Dry draw, 20 lks. wide, 5 lks. weep, drains E.; asc. abruptly.
- 27.00 N. rim of canon, bears E. and W.; asc. over rolling mesa.
- 34.00 Top of asc., bears E. and W.; desc. gradually.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor. with brass cap mkd.

$\frac{1}{4}$	S 21	S 22
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1912

From which

A pinon, 8 ins. in diam., bears S. 59° E.,
36 lks. dist., mkd. $\frac{1}{4}$ S 22 BT.A pinon, 6 ins. in diam., bears S. 50° W.,
16 lks. dist., mkd. $\frac{1}{4}$ S 21 BT.

Subdivision of T. 36 S., R. 23 E.

Chains. 40.50	Edge of Alkali Canon, bears NW. and SE.; desc. over rim rock 40 ft. high, continue desc. over rough broken slope over a series of ridges and ravines, through scattering cedar timber.
48.00	Draw, dry, 50 alks. wide, 10 lks. deep, drains SE.
64.00	Alkali Wash, 1 ch. wide, 10 lks. deep, drains SE.; asc. over broken NW. slope of canon, through dense cedar and pinon timber.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 15, 16, 21 and 22, with brass cap mkd.

T36S R23E

S 16	S 15
S 21	S 22

1912

From which

A cedar, 8 ins. in diam., bears N. 27° E.;
 30 lks. dist., mkd. T36S R23E S15 BT.

A pinon, 10 ins. in diam., bears S. 62° E.;
 8 lks. dist., mkd. T36S R23E S22 BT.

A pinon, 8 ins. in diam., bears S. $68^{\circ}30'$ W.,
 98 lks. dist., mkd. T36S R23E S21 BT.

A pinon, 10 ins. in diam., bears N. 83° W.,
 77 lks. dist., mkd. T36S R23E S16 BT.

Land rolling and broken.

Soil, sandy loam on mesa; stony and adobe on slopes and sandy in canon bottom; 2nd and 4th rates.

Timber, cedar and pinon.

August 7: At 12h 06m, p. m., l. m. t., I set off $16^{\circ}22'$ N. on the lat. arc, and at the cor. of secs. 15, 16, 21 and 22, observe the sun on the meridian, the resulting lat. is $37^{\circ}41'$ N.

Thence I run

S. $89^{\circ}54'$ E. on random line bet. secs. 15 and 22.40.00 Set temp $\frac{1}{4}$ sec. cor.

Chains.

- 79.94 Intersect the N. and S. line, 35 lks. S. of the cor. of secs. 14, 15, 22 and 23.
 Thence, S. $89^{\circ} 51'$ W., on true line bet. secs. 15 and 22.
 Desc. gradually over mesa land covered with dense cedar and pinon timber.
- 33.00 Dry draw, 30 lks. wide, 5 lks. deep, drains Westerly.
- 39.00 Head of canon, drains W.; desc. abruptly over rim 40 ft. high, continue desc. over broken S. slope of canon, covered with dense scrub oak undergrowth.
- ✓ 39.97 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

 $\frac{1}{4}$
S. 15

S. 22 ✓

1912

- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 56.00 Bottom of broken brushy S. slope of canon, bears $N80^{\circ}$ E. and S. 80° W.; continue in sandy bottom of canon.
- 60.00 Dry canon draw, 1 ch. wide, 20 lks. deep, drains SW.; asc. over the lower part of a point of mesa, projecting S., over ridges and ravines, covered with dense cedar and pinon timber., bears NE. and SW.
- 76.00 Desc. over W. slope of point, bears N. and S.
- 79.94 The cor. of secs. 15, 16, 21 and 22.
 Land, mountainous and rolling.
 Soil, sandy loam on mesa, adobe and clay on sides of canon, sandy in canon bottom.
 Timber, cedar and pinon.

August 7, 1912

U. S. Surveyor.

Subdivision of T. 36 S., R. 23 E.

Chains.

August 16: At 9h. 10m a. m., l. m. t., I set off $37^{\circ} 40' 30''$ on the lat. arc, and $13^{\circ} 44' N.$ on the decl. arc, and determine a meridian with the solar at the cor. of secs. 15, 16, 21 and 22.

Thence,

N. $0^{\circ} 02'$ W., bet. secs., 15 and 16.

Over broken surface, ascending SW. slope of mesa, along the E. side of Alkali Canon over large boulders, and through dense cedar and pinon.

- 18.60 Top of rim rock 50 ft. high, at W. edge of mesa, on point projecting W. Over mesa point.
- 26.00 Edge of mesa point, 20 ft. perpendicular ledge, NE. and SW. desc. over north westerly slope, very broken.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in mound of stone and earth, on bed rock, for the $\frac{1}{4}$ sec. cor. with brass cap mkd.

$\frac{1}{4}$ S 16	S 15
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1912

From which

A cedar, 18 ins. in diam., bears S. 10° E.,
14 lks. dist., mkd. $\frac{1}{4}$ S 15 BT.

A pinon, 6 ins. in diam., bears West,
18 lks. dist.; mkd. $\frac{1}{4}$ S 16 BT.

- 47.00 Dry wash in canon, course SW.
- 57.00 Ledge rim brs. NW. and SE.
- 72.75 Ledge rim bears NE. and SW.; desc. abruptly, 57 ft. over huge boulders.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the earth and stone, for the cor. of secs. 9, 10, 15 and 16, with brass cap mkd.

T 36 S R 23 E

S 9	S 10
-----	------

S 16	S 15
------	------

1912

From which

Subdivision of T. 36 S., R. 23 E.

Chains.

A cedar, 6 ins. in diam., bears N. 32° E.,

23 lks. dist., mkd. T36S R23E S10 BT.

A pi non, 8 ins. in diam., bears S. 68° E.,

27 lks. dist., mkd. T36S R23E S15 BT.

A pinon, 6 ins. in diam., bears S. 50° W.,

90 lks. dist., mkd. T36S R23E S16 BT.

A sandstone boulder, 25x15x15 mkd. X and B O

bears N. 82° W., 40 lks. dist.

Land very broken.

Soil, stony, poor. 4th rate.

Timber, cedar and pinon. Scant grazing.

Aug. 16:

At this cor, at apparent noon, I set off $13^{\circ}42'$ N. on the decl. arc, and observe the sun on the meridian. The resulting lat. reads, $37^{\circ} 41' 30''$ which is correct, for practical purposes.

Thence I run

N. $89^{\circ} 51'$ E., on random line bet. secs. 10 and 15.40.00 Set temp. $\frac{1}{4}$ secs cor.

80.04 Intersect the N. and S. line, 3 lks. S. of the cor. of secs. 10, 11, 14 and 15.

Thence, S. $89^{\circ} 50'$ W., on true line bet. secs. 10 and 15.

Over rolling land, through dense cedar and pinon.

7.00 Leave timber and enter sage brush opening, N. and S.

17.00 Leave opening, enter cedar and pinon.

24.00 Wash, dry 20 lks. wide, cse. SW. grad. asc.

40.02 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd. $\frac{1}{4}$
S. 10

S. 15

1912

From which

A cedar, 12 ins. in diam., bears N. $9^{\circ}15'W.$,88 lks. dist., mkd. $\frac{1}{4}$ S10 BT.

A cedar, 12 ins. in diam., bears South,

30 lks. dist., mkd. $\frac{1}{4}$ S15 BT.

Chains.

41.00 Leave cedar and pinon, enter scat. dead timber and sage brush opening, bears N. and S.

65.00 Leave opening, enter cedar and pinon, grad. desc.

76,50 Ledge rim of canon, brs. NE. and S. desc. 75 ft.

80.04 The cor. of secs. 9, 10, 15 and 16.

Land, rolling and broken.

Soil, stone and sandy mesa bench loam. 1st to 4th rate.

Good grazing, 34 chs., scant grazing 46 chs.

Aug. 16:

At this point, at 3h45m p. m., l. m. t., I set off $37^{\circ} 41' 30''$ on the lat. arc, and $13^{\circ} 39'$ N. on the decl. arc,

and determine a meridian with the solar. My line coincides with the meridian thus found.

August 16, 1912

h.06m.
August 18: At 10 a. m., l. m. t., I set off $37^{\circ} 41' 30''$

on the lat. arc, and $13^{\circ} 05'$ N. on the decl. arc and

determine a meridian at the cor. of secs. 9, 10, 15 and
16.

Thence, N. $0^{\circ} 02'$ W., bet. secs. 9 and 10.

Chains.

Over broken surface. Desc. into small canon, through
dense cedar and pinon and oak brush.

1.50 Canon wash, dry, 20 lks. wide, cse. S. W. Small spring
clear, in wash. asc.

4.00 N. rim of canon, brs. NE. and SW. grad. asc. over rolling
land draining SE.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor. with brass cap mkd.

$\frac{1}{4}$ S 9 | S 10

1912

From which

A cedar, 16 ins. in diam., bears S. 40° E.,

10 lks. dist., mkd. $\frac{1}{4}$ S10 ET.

A cedar, 22 ins. in diam., bears S. $56^{\circ}30'W.$,

59 lks. dist., mkd. $\frac{1}{4}$ S9 ET.

48.00 Enter sage brush, brs. E. and W.

Subdivision of T. 36 S., R. 23 E.

Chains.

- 55.00 Desc. grad.
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in
 the ground for the cor. of secs. 3, 4, 9 and 10, with
 brass cap mkd.

T 36 S R 23 E

S 4	S 3
S 9	S 10

1912

From which

A pinon, 8 ins. in diam., bears N. 62° E.,
 29 lks. dist., mkd. T36S R23E S3 BT.

A pinon, 10 ins. in diam., bears S. 59° E.,
 42 lks. dist., mkd. T36S R23E S10 BT.

A pinon, 10 ins. in diam., bears S. 21° W.,
 46 lks. dist., mkd. T36S R23E S9 BT.

A pinon, 12 ins. in diam., bears N. 70° W.,
 64 lks. dist., mkd. T36S R23E S4 BT.

Land, rolling, and broken.

Soil, sandy loam and rocky, 2nd to poor, 4th rate.

Timber, cedar and pinon an occasional yellow pine.
 On line only early in forenoon. Quit work too early to
 take noon lat. observation. August 18, 1912.

August 15th, At 8h45m, a.m., 1. m. t., L set off $37^{\circ} 42'$
 $30''$ on the lat. arc, and $14^{\circ} 03'$ N. on the decl. arc,
 and determine a meridian, at the cor. of secs. 3, 4,
 9 and 10.

Thence I run

N. $89^{\circ} 50'$ E. on random line, bet. secs. 3 and 10.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.14 Intersect the N... and S... line, .9 lks. S. of the cor. of
 secs. 2, 3, 10 and 11.

Thence, S. $89^{\circ} 46'$ W., on true line bet. secs. 3 and 10.

Over broken surface in canon, through dense cedar and
 pinon.

4.00 Canon wash, 30 lks. wide, dry, cse. S. 80° E. asc. steep
 rocky slope, 150 ft.

Subdivision of T. 36 S., R. 23 E.

Chains.

- 16.00 Top of asc. on E. rim of mesa, brs. NW. and S. 70° E.
About 25.00 chs. up this canon brg. NW. is a small clear
spring.
- 40.07 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$$\begin{array}{r} \frac{1}{4} \\ \hline S & 3 \\ \hline S & 10 \end{array}$$

1912

From which

A cedar, 12 ins. in diam., bears N. $6^{\circ}15' E.$,
82 lks. dist., mkd. $\frac{1}{4}$ S3 BT.

A cedar, 12 ins. in diam., bears S. $56^{\circ}15' E.$,
12 lks. dist., mkd. $\frac{1}{4}$ S10 BT.

- 45.50 Leave cedar and pinon, enter sage brush opening, in scat.
dead timber, over rolling surface.
- 46.20 Old wagon trail, bet. Montezuma Canon and the Bluff-Monti-
cello stage road, brs. N. and S.
- 73.00 Leave opening, enter live cedar and pinon. Grad. desc. to
canon.
- 80.14 The cor. of secs. 3, 4, 9 and 10.
Land, broken, about 40 chs. Rolling 40 chs.
Soil, sandy bench loam, about 40 chs. Poor. 4th rate, 40 chs.
Timber, cedar and pinon, 52 chs. Open and dead timber 28
chs.

Grazing, good in openings. Scant in timber.

Aug. 15:
At this cor., at apparent noon, I set off $14^{\circ}-01'$ N.
on the decl. arc and observe the sun on the meridian.
the resulting lat. is $37^{\circ} 42' 30''$ which is approximately
correct.

Thence I run

N. $0^{\circ} 02' W.$, bet. secs. 3 and 4.

Over broken surface, descending through dense cedar and
pinon.

13.44 Pole fence, brs. NE. and SW.

15.00 Along E. edge of canon drawing S. $30^{\circ} W.$, through oak

Chains.

- brush scat. cedar and pinon.
- 30.00 Small canon cse. SW. A spring of clear cold water on line flows W.
- 32.32 Intersect the 7th Standard Parallel, 25.72 chs. E. of the Stand. cor. of secs. 33 and 34, T. 35 S., R. 23 E. An iron post 3 ins. in diam., firmly set. mkd. and witnessed as described by the Surveyor General. At the point of intersection I set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in mound of stone on solid bed rock, for the closing cor. for secs. 3 and 4, with brass cap mkd.

T 35 S R 23 E
 S 33. | S 34.
 C C
 S 4. | S 3.
 T 36 S
 1912

From which

A yellow pine, 30 ins. in diam., bears S. 23° 30' E., 180 lks. dist., mkd. T36S R23E S3 B
 A yellow pine, 18 ins. in diam., bears S. 88° 30' W., 173 lks. dist., mkd. T36S R23E S4 B

Land broken.

Soil, stony, poor 4th rate.

Timber, cedar and pinon and an occasional yellow pine.

Undergrowth, sage brush and oak brush.

Scant grazing.

August 15. 1912.

Daniel B. Miller

U. S. Surveyor.

July 29: At 8h05m, a. m., 1. m. t., I set off 37° 38' N. on the lat. arc, 18° 46' 00" N. on the decl. arc, and, at the cor. of secs. 4, 35, 33 and 32 on Subdy. of Tp. heretofore described, determine a meridian with the solar Thence I run

Chains.	N. $0^{\circ} 03'$ W., bet. secs. 32 and 33. Over rolling mesa, covered with scattering scrub cedar timber.
4.00	Dry draw, 20 lks. wide, drains SW.
10.00	Dry draw, 50 lks. wide, drains SW.
31.50	Dry draw, 20 lks. wide, drains SW.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
	$\begin{array}{|c|c|} \hline & \frac{1}{4} \\ \hline S & 32 | S & 33 \\ \hline \end{array}$ 1912
	From which
	A pinon, 10 ins. in diam., bears S. 70° E., 44 lks. dist., mkd. $\frac{1}{4}$ S33 BT.
	A cedar, 10 ins. in diam., bears N. $83^{\circ} 30'$ W., 85 lks. dist., mkd. $\frac{1}{4}$ S32 BT.
44.00	Dry draw, 50 lks. wide, drains SW.
48.00	Dry draw, 1 ch. wide, drains SW.
51.50	Dry draw, 50 lks. wide, drains SE.
60.00	Enter dense cedar and pinon timber.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 28, 29, 32 and 33, with brass cap mkd.
	. T 36 S R 23 E .
	$\begin{array}{|c|c|} \hline & S \\ \hline S & 29 | S & 28 \\ \hline \end{array}$ $\begin{array}{|c|c|} \hline & S \\ \hline S & 32 | S & 33 \\ \hline \end{array}$ 1912
	From which
	A cedar, 6 ins. in diam., bears N. 16° E., 22 lks. dist., mkd. T36S R23E S28 BT.
	A cedar, 6 ins. in diam., bears S. $22^{\circ} 30'$ E., 30 lks. dist., mkd. T36S R23E S33 BT.
	A cedar, 12 ins. in diam., bears S. $73^{\circ} 30'$ W., 43 lks. dist., mkd. T36S R23E S32 BT.
	A cedar, 16 ins. in diam., bears N. 15° W., 24 lks. dist., mkd. T36S R23E S29 BT.
	Land rolling.

Subdivision of T. 36 S., R. 23 E.

Chains.

Soil, sandy loam, 1st rate.

Timber, cedar and pinon.

July 29: At 12h06m p. m., l. m. t., I set off $18^{\circ} 43' N.$, on the decl. arc, and at the cor. of secs. 28, 29, 32 and 33, observe the sun on the meridian, the resulting lat. is $37^{\circ} 39' N.$

Thence I run

N. $89^{\circ} 46' E.$, on random line bet. secs. 28 and 33.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.94 Intersect the N. and S. line, 21 lks. N. of the cor. of secs. 27, 28, 33 and 34.

Thence, S. $89^{\circ} 55' W.$, on true line bet. secs. 28 and 33.

Over rolling mesa, covered with sage brush undergrowth and scattering scrub cedar timber.

10.00 Dry draw, 20 lks. wide, drains SW.

18.00 Dry draw, 30 lks. wide, drains SE

32.70 Abandoned Bluff-Monticello Road, bears N. and S.

39.97 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 28
—
S 33
1912

From which

A cedar, 14 ins. in diam., bears N. $75^{\circ} W.$, 48 lks. dist., mkd. $\frac{1}{4}$ S28 BT.

A cedar, 10 ins. in diam., bears S. $45^{\circ} E.$, 82 lks. dist., mkd. $\frac{1}{4}$ S33 BT.

67.00 Dry draw, 30 lks. wide, drains SW.

72.00 Dry draw, 30 lks. wide, drains S.; enter dense cedar and pinon timber.

79.94 The cor. of secs. 28, 29, 32 and 33.

Land, rolling.

Soil, sandy loam; 1st rate.

Timber scattered scrub cedar and pinon.

July 29, 1912.

Subdivision of T. 36 S., R. 23 E.

Chains.

July 31: At 8h06m, a. m., l. m. t., I set off $37^{\circ} 39' N.$
on the lat. arc, $18^{\circ} 17' N.$ on the decl. arc, and at
the cor. of secs. 28, 29, 32 and 33, determine the
meridian with the solar.

Thence I run

N. $0^{\circ} 03'$ W., bet. secs. 28 and 29.Over rolling mesa, covered with dense cedar and pinon
timber.

6.00 Mesa ruins on line.

16.00 Start gradual desc., bears NE. and SW.

21.00 Dry draw, 2 chs. wide, 10 lks. deep, drains SW.; asc.

25.00 Top of asc., bears NE. and SW.; desc. gradually.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S 29	S 28
------	------

1912

From which

A cedar, 10 ins. in diam., bears N. 45° W.,
43 lks. dist., mkd. $\frac{1}{4}$ S 29 BT.

A cedar, 14 ins. in diam., bears S. 33° E.,
51 lks. dist., mkd. $\frac{1}{4}$ S 28 BT.

54.00 Leave dense cedar and pinon timber, bears NE. and SW.,
enter open park 12 chs. wide, covered with sage brush
undergrowth.

60.00 Dry draw, 20 lks. wide, 10 lks. deep, drains SW.

66.00 Leave open park, bears NE. and SW., enter dense cedar
and pinon timber.80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in
the ground for the cor. of secs. 20, 21, 28 and 29,
with brass cap mkd.

T 36 S R 23 E

S 20	S 21
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S 29	S 28
------	------

1912

From which

A cedar, 10 ins. in diam., bears N. 8° E.,

Subdivision of T. 36 S., R. 23 E.

Chains.

- 57 lks. dist., mxd. 7368 R22E 621 BT.
A cedar, 6 ins. in diam., bears S. 8° E.,
29 lks. dist., mxd. 7368 R22E 626 BT.
A cedar, 14 ins. in diam., bears S. 46° W.,
69 lks. dist., mxd. 7368 R22E 629 BT.
A cedar, 6 ins. in diam., bears N. 1° W.,
55 lks. dist., mxd. 7368 R22E 630 BT.

Land rolling.

Soil, sandy loam; Int. rate.

Timber scrub cedar and pine.

July 31: At 400' G.C.M p. m., 1.m. t., I set off $18^{\circ} 14'$ N.
on the S.E. arc, and at the cor. of secs. 20, 21, 28
and 29, observe the sum of the meridians, the resulting
angle is $27^{\circ} 45'$ N.

Hence I ran

N. $69^{\circ} 22'$ N., or random line bet. secs. 21 and 28.

45.00 Set temp. & sec. cov.

40.00 Intersect the N. and S. line, 14 lbs. N. of the cor. of
secs. 21, 28, 27 and 20.

Hence, S. $69^{\circ} 25'$ N., on true line bet. secs. 21 and 28,
arc. over rolling mesa, covered with dense cedar and
pine timber.

4.00 Dry draw, 50 lbs. wide, 3 lks. deep, drains N. 70° N.

6.00 Dry draw 20 lbs. wide, drains SW.

12.00 Dry draw, 20 lbs. wide, drains SW.; continue nor.

40.00 Set on iron post, 2 ft. long, 1 in. in diam., 24 ins. in
the ground for the 1 sec. cor., with brown cap mxd.

6.21

6.22

1930

From which,

- A cedar, 12 ins. in diam., bears S. 71° W.,
25 lks. dist., mxd. 4 S 26 BT.
A cedar, 10 ins. in diam., bears N. 70° W.,
36 lks. dist., mxd. 4 S 21 BT.

Subdivision of T. 36 S., R. 23 E.

Chains.

47.00	Abandoned Bluff-Monticello Road, bears N. and SE.
64.00	Dry draw, 10 lks. wide, drains SW.
68.00	Leave dense cedar and pinon timber, enter open sage brush park, bears NE. and SW.
70.00	Dry draw, 20 lks. wide, 5 lks. deep, drains SW.; asc.
76.00	Leave open sage brush park, enter dense cedar and pinon timber, bears NE. and SW.
✓ 80.04	The cor. of secs. 20, 21, 28 and 29. Land, rolling. Soil, sandy loam; 1st rate. Timber, cedar and pinon.

July 31, 1912.

August 5: At 2h05m, p. m., l. m. t., I set off $37^{\circ} 40' N.$, on the lat. arc, $16^{\circ} 55' N.$ on the decl. arc, and at the cor. of secs. 20, 21, 28 and 29, determine the meridian with the solar.

Thence I run

N. $0^{\circ} 03' W.$, bet. secs. 20 and 21.

Over rolling mesa, covered with dense cedar and pinon timber.

34.00	Top of rolling asc., bears E. and W.; desc. gradually.
36.00	Dry draw, 10 lks. wide, drains W.; asc.
37.00	Top of asc., bears E. and W.; continue gradual asc.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$ ✓
S 20 | S 21

1912

From which

A cedar, 14 ins. in diam., bears N. $26^{\circ} E.$,
28 lks. dist., mkd. $\frac{1}{4}$ S21 BT.

A cedar, 10 ins. in diam., bears S. $55^{\circ} W.$,
61 lks. dist., mkd. $\frac{1}{4}$ S20 BT.

42.00	Top of rolling asc., bears E. and W.; desc. gradually.
44.00	Dry draw, 10 lks. wide, drains W.; asc.

Chains.

- 46.00 Top of asc., bears E. and W.; desc.
- 47.00 Leave dense cedar and pinon timber, bears NE. and SW..
- 70.00 Dry draw, drains SW.; asc.
- 80.00 Set an iron post, 3 ft. long, 2 in. in diam., 24 ins. in the ground for the cor. of secs. 16, 17, 20 and 21, with brass cap mkd.

T 36 S R 23 E
 S 17 | S 16
 -+-----
 S 20 | S 21
 1912

From which

A cedar, 24 ins. in diam., bears N. 9° E.,
 167 lks. dist., mkd T36S R23E S16 BT.

A cedar, 24 ins. in diam., bears S. $4^{\circ}30' E.$,
 214 lks. dist., mkd. T36S R23E S21 BT.

A cedar, 12 ins. in diam., bears S. $8^{\circ}30' W.$,
 92 lks. dist., mkd. T36S R23E S20 BT.

A pinon, 12 ins. in diam., bears N. 76° W.,
 142 lks. dist., mkd. T36S R23E S17 BT.

Land, rolling.

Soil, sandy loam; 1st rate.

Timber, cedar and pinon.

August 5, 1912.

August 8: At 2h 05m, p. m., 1. m. t., I set off $37^{\circ} 41'$ N. on the lat. arc, $16^{\circ} 05'$ N. on the decl. arc, and at the cor. of secs. 16, 17, 20 and 21, determine the meridian with the solar.

Thence I run

N. $89^{\circ} 49'$ E., on random line bet. secs. 16 and 21.

40.00 Set temp. & sec. cor.

80.03 Intersect the N. and S. line, 5 lks. S. of the cor. of secs. 15, 16, 21 and 22.

Thence, S. $89^{\circ} 47'$ W., on true line, bet. secs. 16 and 21.

Desc. over broken rock slope of Alkali Canon, covered with cedar and pinon pine.

Chains.

- 9.00 Bottom of broken rock slope, bears NW. and SE.
- 10.00 Alkali Wash, 1 ch. wide, 10 lks. deep, drains SE.; asc. over broken rocky W. slope of canon.
- 16.00 Rim rock, 40 ft. high, bears NW.. and SE. ; top of mesa, 200 ft. above bottom of canon.; asc. gradually.
- 26.00 Dry draw, 30 lks. wide, drains SE.
- 28.00 Same draw, drains NE.
- 40.01 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

 $S \frac{1}{4} 16$ $S 21$

1912

From which

- A cedar, 10 ins. in diam., bears N. 30° E., 5 lks. dist., mkd. $\frac{1}{4}$ S16 BT.
- A cedar, 12 ins. in diam., bears S. 24° W., 20 lks. dist., mkd. $\frac{1}{4}$ S21 BT.
- 53.00 Abandoned Bluff-Monticello Road, bears N. and S.
- 65.00 Dry draw, 10 lks. wide, drains SW.
- 80.03 The cor. of secs. 16, 17, 20 and 21.
Land rolling and broken.
Scil, sandy loam on mesa, 1st rate. Adobe and sandy in canon; 4th rate.
Timber, cedar and pinon.

August 8, 1912.

August 9: At 8h 05m, a. m., 1. m. t., I set off $37^{\circ} 40'$ N. on the lat. arc, $15^{\circ} 52' 30''$ N. on the decl arc, and at the cor. of secs. 16, 17, 20 and 21, determine the meridian with the solar.

Thence I run

N $^{\circ}$ 03' W., bet. secs. 16 and 17.

Over rolling mesa covered with sage brush undergrowth, and scattering scrub cedar and pinon timber.

- 8.00 Dry draw, 20 lks. wide, 5 lks. deep, drains SW.

Chains	
15.00	Dry draw, 30 lks. wide, 4 lks. deep, drains SW.
22.00	Dry draw, 30 lks. wide, 5 lks. deep, drains SW.
38.00	Dry draw, 50 lks. wide, drains SW.; leave scattering scrub cedar and pinon timber, bears NE. and SW.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$ S 17 | S 16

1912

From which

A cedar, 16 ins. in diam., bears S. $26^{\circ}30' E.$,
95 lks. dist., mkd. $\frac{1}{4}$ S16 BT.

Dig pits, 18x18x12 ins. N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. No other bearing trees within limits.

44.00	Dry draw, 1 ch. wide, drains SW.
46.00	Dry draw, 50 lks. wide, drains E.
60.00	Dry draw, 40 lks. wide, drains E.; asc.
64.00	Enter dense cedar and pinon timber, bears NE. and SW.
71.00	Barren sand stone ledge, 20 ft. high, bears E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam. 24 ins. in the ground for the cor. of secs. 8, 9, 16 and 17, with brass cap mkd.

T 36 S R 23 E

S 8 | S 9

S 17 | S 16

1912

From which

A cedar, 24 ins. in diam., bears N. $79^{\circ} E.$,
30 lks. dist., mkd. T36S R23E S9 BT.

A cedar, 8 ins. in diam., bears S. $56^{\circ}30' E.$,
23 lke. dist., mkd. T36S R23E S16 BT.

A cedar, 10 ins. in diam., bears S. $53^{\circ}30' W.$,
6 lks. dist., mkd. T36S R23E S17 BT.

A pinon, 8 ins. in diam., bears N. $30^{\circ} W.$,
38 lks. dist., mkd. T36S R23E S8 BT.

Land, rolling.

Chains.

Soil, sandy loam and rocky; 1st and 4th rates.

Timber, cedar and pinon.

August 9, 1912.

August 14: At 9h 35m a. m., l. m. t., I set off $37^{\circ} 41' 30''$ N. on the lat. arc, $14^{\circ} 22'$ N. on the decl. arc, and at the cor. of secs. 8, 9, 16 and 17, determine the meridian with the solar.

Thence I run

N. $89^{\circ} 47'$ E., on random line bet. secs. 9 and 16.40.00 Set temp. $\frac{1}{4}$ sec. cor.

August 14: At 12h 05m p. m., l. m. t., I set off $14^{\circ} 19'$ N. on the decl. arc, and at this temp. $\frac{1}{4}$ sec. cor., observe the sun on the meridian, the resulting lat. is $37^{\circ} 41'$ N.

80.05 Intersect the N. and S. line, 14 lks. N. of the cor. of secs. 9, 10, 15 and 16.

Thence, S. $89^{\circ} 53'$ W., on true line bet. secs. 9 and 16.

Over mountainous land in Alkali Canon, covered with scattering scrub cedar timber.

1.00 Dry draw, 40 lks. wide, 10 lks. deep, drains SW.; asc. over broken point of mesa, projects S.

12.00 Top of asc., bears N. and S.; desc. into Alkali canon.

20.00 Alkali Wash, dry, in canon, 40 lks. wide, 15 lks. deep, drags S.; asc. over broken rocky slope of canon.

34.00 Rim rock. 75 ft. high, bears N. and S.; continue gradual asc. over rolling mesa.

40.02 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.
 $\frac{1}{4}$
S. 9 ✓

S. 16 ✓

1912

Dig pits, 18x18x12 ins., E. and W. of Post, 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

50.00 Abandoned Bluff-Monticello Road bears N. and S.

54.00 Enter dense cedar and pinon timber, bears N. and SE.

Chains:

- 61.00 Top of rolling asc. bears NE. and SW.; desc. gradually.
- 74.00 Dry draw, 20 lks. wide, drains S.; asc.
- 80.05 The cor. of secs. 8, 9, 16 and 17.
Land mountainous and rolling.
Soil, sandy loam on mesa; 1st rate. Adobe and stone in
cannon; 4th rate.
Timber, cedar and pinon.

August 14, 1912.

August 9: At 2h05' p. m., a. m. t., I set off $37^{\circ} 41'$
 $30''$ N. on the lat. arc, $15^{\circ} 48'$ N. on the decl. arc,
and at the cor. of secs. 8, 9, 16 and 17, determine
the median with the solar.

Thence I run

N. $0^{\circ} 03'$ W., bet. secs. 8 and 9.

Over rolling mesa, covered with scattering scrub cedar
timber and scrub oak undergrowth.

14.00 Asc. over rocky SE. slope of mesa.

24.00 Top of asc., bears NE. and SW.; desc. gradually.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$ ✓
S 8 | S 9 ✓

1912

From which

A cedar, 24 ins. in diam., bears N. 72° E.;
94 lks. dist., mkd. $\frac{1}{4}$ S9 BT.

A pinon, 10 ins. in diam., bears S. 15° W.,
29 lks. dist., mkd. $\frac{1}{4}$ S8 BT.

60.00 Dry draw, 10 lks. wide, 3 lks. deep, drains SW.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in
the ground for the cor. of secs. 4, 5, 8 and 9, with
brass cap mkd.

T 35 S R 23 E

S 5 ✓	S 4 ✓
—	—
S 8 ✓	S 9 ✓

1912

Subdivision of T. 36 S., R. 23 E.

Chains.

From which

A cedar, 12 ins. in diam., bears N. 50° E.,
 30 lks. dist., mkd. T36S R23E S4 BT.

A cedar, 12 ins. in diam., bears S. 70° E.,
 45 lks. dist., mkd. T36S R23E S9 BT.

A pinon, 8 ins. in diam., bears S. 84° W.,
 33 lks. dist., mkd. T36S R23E S8 BT.

A pinon, 12 ins. in diam., bears N. 65° W., 2
 23 lks. dist., mkd. T36S R23E S5 BT.

Land, rolling.

Soil, sandy loam and stony; 3rd rate.

Timber, cedar and pinon.

August 9, 1912.

August 17: At 9h 04m, a. m., l. m. t., I set off $37^{\circ} 42'$
 $30''$ N. on the lat. arc, $13^{\circ} 25'$ N. on the decl. arc,
 and at the cor. of secs. 4, 5, 8 and 9, determine the
 meridian with the solar.

Thence I run

N. $89^{\circ} 53'$ E., on random line bet. secs. 4 and 9.40.00 Set temp. $\frac{1}{4}$ sec. cor.

August 17: At 12h 04m, p. m., l. m. t., I set off $13^{\circ} 22'$
 $30''$ N. on the decl. arc, and at the temp. $\frac{1}{4}$ sec. cor.
 observe the sun on the meridian, the resulting lat.
 is $37^{\circ} 42'$ N.

80.16 Intersect the N. and S. line 7 lks. N. of the cor. of secs.
 3, 4, 9 and 10.Thence, S. $89^{\circ} 56'$ W., on true line bet. secs. 4 and 9.Over rolling and broken land, covered with dense cedar
 and pinon timber.3.00 Rim rock, 50 ft. high, bears N. and S.; desc. abruptly
 over broken rock slope of Alkali Canon.5.00 Alkali Wash in canon, 100 ft. deep, drains S.; asc over
 broken W. slope of canon.7.00 Rim rock, 50 ft. high, bears N. and S.; continue gradual
 asc. over rolling mesa.

10.00 Top of asc., bears N. and S., desc. abruptly into draw.

Subdivision of T. 36 S., R. 23 E.

Chains

- 33.00 Dry draw, 30 lks, wide, drains S., asc, over ridges and ravines.
- 38.00 Edge of mesa, bears N. and S.; continue over rolling mesa.
- 40.08 Set an iron post, 3 ft. long, 1 in, in diam., 24 ins, in the ground for the $\frac{1}{4}$ sec, cor., with brass cap mkd,

S 4S 9

1912

From which

A cedar, 24 ins, in diam., bears N. $49^{\circ} 30' W.$,
28 lks: dist., mkd. $\frac{1}{4}$ S4 BT.

A pihon, 14 ins, in diam., bears S. $49^{\circ} W.$,
33 lks. dist., mkd. $\frac{1}{4}$ S9 BT.

- 55.50 Abandoned Bluff-Monticello Road bears N. and S.
- 63.00 Top of asc., bears NE. and SW.; desc. gradually.
- 67.00 Rim rock, 15 ft. high, bears NE. and SW.; continue desc.
- 68.00 Bottom of desc., bears NE. and SW; asc,
- 72.00 Rim rock, 20 ft, high, bears NE. and SW.; continue gradual asc.
- 80.16 The cor. of secs. 4, 5, 8 and 9.
Land rolling and broken.
Soil sandy loam and stone; 3rd rate.

Timber, cedar and pinon.

August 17, 1912.

August 9: At 4h05m p. m., l. m. t., I set off $37^{\circ} 42' 30''$ N. on the lat. arc, $15^{\circ} 47\frac{1}{2}' S.$ on the decl. arc, and at the cor. of secs. 4, 5, 8 and 9, determine the meridian with the solar.

Thence I run

N. $0^{\circ} 03' W.$, bet, secs, 4 and 5.

Asc. over rolling land covered with dense cedar and pinon timber.

- 20.00 Dry draw, 20 lks. wide, 3 lks. deep, drains W.; cont. asc;
- 32.61 Intersect the Seventh Standard Parallel South, 14.45 chs. W. of the standard $\frac{1}{4}$ sec., cor. for sec. 33, T. 35 S., R. 23 E.-; which is
- An iron post, 1 in, in diam., 24 ins, in the ground, firmly set; mkd. and witnessed as described by the Surveyor General.

Chains.

At the point of intersection I set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the closing cor. for secs. 4 and 5, with brass cap mkd.

T 35 S R 23 E

S 32 S 33

c c

S 5 S 4

T 36 S R 23 E

1912

From which

A cedar, 12 ins. in diam., bears S. 60° E.,

33 lks. dist., mkd. T36S R23E S 4 CC BT.

A cedar, 12 ins. in diam., bears S. 75° W.,

35 lks. dist., mkd. T36S R23E S 5 CC BT.

Land, rolling.

Soil, sandy loam; 2nd rate.

Timber, cedar and pinon.

August 9, 1912.

July 30: At 8h06m, a. m., l. m. t., I set off $37^{\circ} 38' N.$, on the lat. arc, $18^{\circ} 32' N.$ on the decl. arc and at the cor. of secs. 5, 6, 31 and 32 on the S. bdy. of the Tp. heretofore described, determine the meridian with the solar.

Thence I run

N. $0^{\circ} 03'$ W., bet. secs. 31 and 32.

Asc. over rolling mesa, covered with scattering scrub cedar timber and sage brush undergrowth.

10.00 Leave sage brush undergrowth, enter dense cedar and pinon timber, bears NE. and SW.

40.00 Set an iron post, 3 ft, long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

 $\frac{1}{4}$

S 31 S 32

From which

A cedar, 7 ins. in diam. bears N. $64^{\circ} 30'$ E.,
26 lks. dist., mkd. $\frac{1}{4}$ S32 BT.A cedar, 12 ins. in diam., bears S. 32° W.,
35 lks. dist., mkd. $\frac{1}{4}$ S31 BT.

47.00 Dry draw, 30 lks. wide, 5 lks. deep, drains E.

Subdivision of T. 36 S., R. 23 E.

Chains.

- 68.00 Dry draw, 30 lks. wide, 5 lks. deep, drains SE.; ✓ ✓ ✓
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in
 the ground for the cor. of secs. 29, 30, 31 and 32,
 with brass cap mkd.

T 36 S R 23 E

S 30	S 29
S 31	S 32

1912

From which

A pinon, 10 ins. in diam., bears N. 43° E.,
 50 lks. dist., mkd. T36S R23E S29 BT.

A pinon, 12 ins. in diam., bears S. 64° E.,
 66 lks. dist., mkd. T36S R23E S32 BT.

A pinon, 14 ins. in diam., bears S. 46° W.,
 50 lks. dist., mkd. T36S R23E S31 BT.

A pinon, 10 ins. in diam., bears N. 48° W.,
 36 lks. dist., mkd. T36S R23E S30 BT.

Land, rolling.

Soil, sandy loam; 1st rate.

Timber, cedar and pinon.

July 30, 1912.

July 31: At 3h06m, p. m., 1: m. t., I set off $37^{\circ} 39'$ N.
 on the lat. arc, $18^{\circ} 13'$ N. on the decl. arc, and at t
 the cor. of secs. 29, 30, 31 and 32, determine the
 meridian with the solar.

Thence I run

N. $89^{\circ} 46'$ E., on random line bet. secs. 29 and 32.40.00 Set temp. $\frac{1}{4}$ sec. cor.80.00 Intersect the N. and S. line, 9 lks. S. of the cor. of
 secs. 28, 29, 32 and 33.Thence, S. $89^{\circ} 42'$ W., on true line bet. secs. 29 and 32.Over rolling broken land, covered with dense cedar and
 pinon timber.

14.00 Dry draw, 1 ch. wide, 3 lks. deep, drains S.

28.00 Dry draw, 20 lks. wide, drains SW.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
 the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

Subdivision of T. 36 S., R. 23 E.

Chains.

$\frac{1}{4}$ 29 ✓

$\frac{1}{4}$ 32 ✓

1912

From which

A cedar, 10 ins. in diam., bears N. 80° E.,

12 lks. dist.; mkd. $\frac{1}{4}$ S29 BT.

A cedar, 10 ins. in diam., bears S. 50° W.,

23 lks. dist., mkd. $\frac{1}{4}$ S32 BT.

44.00 Head of canon, 2 chs. wide, 50 lks. deep, drains S.; asc.
over broken land.

75.00 Top of asc., edge of mesa, bears N. and S.

77.00 Dry draw, 1 ch. wide, 5 lks. deep, drains S.

80.00 The cor. of secs. 29, 30, 31 and 32.

Land, rolling and broken.

Soil, sandy loam, adobe and stony; 3rd and 4th rates.

Timber, cedar and pinon.

July 31, 1912.

July 30: At 2h06m, p. m., l. m. t., I set off $37^{\circ} 39'$
N. on the lat. arc, $18^{\circ} 28'$ N. on the decl. arc, and
at the cor. of secs. 29, 30, 31 and 32, determine the
meridian with the solar.

Thence I run

S. $89^{\circ} 46'$ W., on random line bet. secs. 30 and 31.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

77.58 Intersect. the Colo. G. M., 5 lks. N. of the cor. of secs.
25, 30, 31 and 36, which is

A sandstone, 18x8x14 ins. above ground, firmly set; mkd.
and witnessed as described by the Surveyor General.

Thence, N. $89^{\circ} 44'$ E., on true line bet. secs. 30 and 31.

Desc. over broken land, covered with dense cedar and
pinon timber.

1.60 Dry draw in canon, 50 ft. deep, drains S.; asc.

25.00 Top of asc., point of ridge, projects S., desc. abruptly
over rim rock 40 ft. high, and a series of ridges and
ravines over the W. slope of Recapture Canon, bears

Subdivision of T. 36 S., R. 23 E.

Chains.	N. and S.
36.50	Recapture Creek, 20 lks. wide, water in holes, 10 lks. deep, course S.; asc. abruptly over broken E. slope of canon.
37.50	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in mound of stone, on solid bed rock, with brass cap mkd.
	<u>S 30</u>
	S 31 ✓ 1912

From which

An oak, 6 ins. in diam., bears N. 18° E.,
57 lks. dist., mkd. $\frac{1}{4}$ S30 BT.

A cedar, 8 ins. in diam., bears S. 19° W.,
21 lks. dist., mkd. $\frac{1}{4}$ S31 BT.

40.60 Rim rock, 30 ft. high, on edge of Recapture Canon, bears N. and S., continue gradual asc., over rolling mesa, covered with dense cedar and pinon timber.

47.50 Dry draw, 50 lks. wide, 5 lks. deep, drains SW.

61.60 Dry draw, 30 lks. wide, 5 lks. deep, drains SW.

67.50 Dry draw, 20 lks. wide, drains S.

77.58 The cor. of secs. 29, 30, 31 and 32.

Land rolling and broken.

Soil, sandy loam, 1st rate on mesa, sandy, adobe and stony in canon; 4th rate.

Timber, cedar and pinon.

July 30, 1912.

August 2: At 8h06m, a. m., 1. m. t., I set off $37^{\circ} 39'$ N. on the lat. arc, $17^{\circ} 47'$ N. on the decl. arc, and at the cor. of secs. 29, 30, 31 and 32, determine the meridian with the solar.

Thence I run

N. $0^{\circ} 03'$ W., bet. secs. 29 and 30.

Over rolling mesa, covered with dense cedar and pinon timber.

12.00 Dry draw, 10 lks. wide, drains E.

16.00 Dry draw, 50 lks. wide, 5 lks. deep, drains SE.

Subdivision of T. 36 S., R. 23 E.

Chains.

- 30.00 Dry draw, 30 lks. wide, 5 lks. deep, drains SE.
 38.00 Dry draw, 40 lks. wide, 5 lks. deep, drains SE.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
 the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd..

S 30	S 29
------	------

1912

From which

- A cedar, 20 ins. in diam., bears N. 24° E.,
 34 lks. dist., mkd. $\frac{1}{4}$ S29 BT.
 A cedar, 10 ins. in diam., bears N. 30° W.,
 42 lks. dist., mkd. $\frac{1}{4}$ S30 BT.
 44.00 Dry draw, 20 lks. wide, drains E.
 56.00 Mesa ruins, 50 lks. W. of line.
 64.00 Dry draw, 30 lks. wide, drains SE.
 78.00 Dry draw, 30 lks. wide, drains SE.
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in
 the ground for the cor. of secs. 19, 20, 29 and 30, with
 brass cap mkd.

T 36 S R 23 E	
S 19	S 20
<hr/>	
S 30	S 29

1912

From which

- A cedar, 18 ins. in diam., bears N. 27° E.,
 36 lks. dist., mkd. T36S R23E S20 BT.
 A cedar, 8 ins. in diam., bears S. 81° E.,
 55 lks. dist., mkd. T36S R23E S29 BT.
 A cedar, 10 ins. in diam., bears S. 31° W.,
 29 lks. dist., mkd. T36S R23E S30 BT.
 A cedar, 12 ins. in diam., bears N. 22° W.,
 56 lks. dist., mkd. T36S R23E S19 BT.

Land, rolling.

Soil, sandy loam; 2nd rate.

Timber, cedar and pinon.

Chains.

Thence I run

N. $89^{\circ} 42'$ E., on random line bet. secs. 20 and 29.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

August 2: At 12h06m p. m., l. m. t. I set off $17^{\circ} 44'$ N. on the decl. arc, and at the temp. $\frac{1}{4}$ cor., observe the sun on the meridian, the resulting lat. is $37^{\circ} 40'$ N.

79.97 Intersect the N. and S. line 26 lks. N. of the cor. of secs. 20, 21, 28 and 29.

Thence, S. $89^{\circ} 53'$ W., on true line bet. secs. 20 and 29.

Over rolling broken mesa, covered with dense cedar and pinon timber.

10.00 Dry draw, 50 lks. wide, 5 lks. deep, drains S.

14.00 Start abrupt desc. into canon, 75 ft. deep, bears N. and S.

20.00 Dry canon wash, 2 chs. wide, 5 lks. deep, drains S.; asc.

30.00 Top of asc., bears N. and S., continue over broken mesa.

39.98 $\frac{1}{2}$ Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 20

S 29
1912

From which

A cedar, 16 ins. in diam., bears N. 6° W.,
37 lks. dist., mkd. $\frac{1}{4}$ S 20 BT.

Dig pits, 18x18x12 ins. E. and W. of post, 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor. No other bearing trees within limits.

44.00 Leave dense cedar and pinon timber, bears NE. and SW., enter open sage brush park.

48.00 Dry draw, 20 lks. wide, 10 lks. deep, drains S.

52.00 Leave open sage brush park, bears NE. and SW.; enter dense cedar and pinon timber.

56.00 Dry draw, 20 lks. wide, drains SW.

79.97 The cor. of secs. 19, 20, 29 and 30.

Land broken.

Soil, sandy loam; 3rd rate. Timber, cedar and pinon pine. Undergrowth, sagebrush.

Chains.

- Thence I run
S. $89^{\circ} 44' W.$, on random line bet. secs. 19 and 30.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 77.38 Intersect the Colo. G. Mer., 2 lks. N. of the cor. of
secs. 19, 24, 25 and 30. A sand stone 3x10x12 ins. above
ground, witnessed as described by the Surveyor General
Thence, N. $89^{\circ} 43' E.$, on true line bet. secs. 19 and 30.
Over rough broken land, covered with dense cedar and
pinon timber, with scattering yellow pine.
 12.40 W. rim of Recapture Canon, 30 ft. high, desc. abruptly
over broken W. slope of canon.
 18.40 Recapture Creek, 10 lks. wide, water in pools, 200 ft.
below mesa, drains S.; asc. abruptly over broken E.
slope of canon.
 29.00 Rim of Recapture Canon, 70 ft. high, bears N. and S.,
continue over rolling broken mesa.
 37.38 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

 $\frac{1}{4}$
S 19S 30
1912

From which

- A cedar, 16 ins. in diam., bears N. $32^{\circ} W.$,
45 lks. dist., mkd. $\frac{1}{4}$ S19 BT.
A pinon, 10 ins. in diam., bears E. $45^{\circ} E.$,
9 lks. dist., mkd. $\frac{1}{4}$ S30 BT.
 59.50 Desc. over rocky ledge 20 ft. high, bears N. and S.
 61.38 A yellow pine tree, $2\frac{1}{2}$ ft. in diam., bears N. 1 ch. dist.
 66.40 Dry draw, 20 lks. wide, drains SE.
 77.38 The cor. of secs. 19, 20, 29 and 30.
Land rolling and broken.
Soil, sandy loam on mesa; 1st rate; sandy and adobe and
rocky in canon; 4th rate.
Timber, cedar, pinion and an occasional yellow pine.

August 2, 1912.

Subdivision of T. 36 S., R. 23 E.

Chains.

August 5: At 8h06m, a. m., l. m.t., I set off $37^{\circ} 40' N.$
on the lat. arc, $16^{\circ} 59' 30'' N.$ on the decl. arcs, and
at the cor. of secs. 19, 20, 29 and 30, determine the
meridian with the solar.

Thence I run

N. $0^{\circ} 03'$ W., bet. secs. 19 and 20.

Over rolling mesa, covered with dense cedar and pinon
timber and outcrop of bed rock.

12.00 Leave dense cedar timber, bears NE. and SW., enter open
sage brush park.

16.00 Dry draw, 30 lks. wide, 5 lks. deep, drains SW.

20.00 Leave open sage brush park, bears NE. and SW., enter
scattering scrub cedar and pinon timber; asc. gradually
over out crop of bed rock.

36.00 Top of gradual asc., bears NE. and SW.; enter dense cedar
and pinon timber.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$	S 20
S 19	

1912

From which

A cedar, 14 ins. in diam., bears N. 60° E.,
76 lks. dist., mkd. $\frac{1}{4}$ S20 BT.

A cedar, 18 ins. in diam., bears S. 68° W.,
46 lks. dist., mkd. $\frac{1}{4}$ S19 BT.

46.00 Dry draw, 20 lks. wide, 3 lks deep, drains SW.

64.00 Dry draw, 10 lks. wide 3 lks. deep, drains SW.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in
the ground for the cor. of secs. 17, 18, 19 and 20,
with brass cap mkd.

T 36 S R 23 E	
S 18	S 17
<hr/>	
S 19	S 20

1912

From which

A pinon, 10 ins. in diam., bears N. 55° E.,

(38)
Subdivision of T. 36 S., R. 23 E.

Chains.

20 lks. dist., mkd. T36S R23E S17 BT.

A cedar, 12 ins. in diam., bears S. 61° E.,

28 lks. dist., mkd. T36S R23E S20 BT.

A cedar, 10 ins. in diam., bears S. 66° W.,

45 lks. dist., mkd. T36S R23E S19 BT.

A cedar, 14 ins. in diam., bears N. 20° W.,

6 lks. dist., mkd. T36S R23E S18 BT.

Land rolling.

Soil, sandy loam and rock; 4th rate.

Timber, cedar and pinon.

August 5, 1912.

August 6: At 8h 36m, a. m., l. m. t., I set off $37^{\circ} 40'$ N. on the lat. arc, $16^{\circ} 42' 30''$ N. on the decl. arc, and at the cor. of secs. 17, 18, 19 and 20, determine the meridian with the solar.

Thence I run

N. $89^{\circ} 53'$ E., on random line bet. secs. 17 and 20.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.98 Intersect the N. and S. line, 9 lks. S. of the cor. of secs. 16, 17, 20 and 21.

August 6: At 12h 06m, p. m., l. m. t., I set off $16^{\circ} 40'$ N. on the decl. arc, and at the cor. of secs. 16, 17, 20 and 21, observe the sun on the meridian, the resulting lat. is $37^{\circ} 41'$ N.

Thence, S. $89^{\circ} 49'$ W., on true line bet. secs. 17 and 20. Over rolling mesa, covered with dense cedar and pinon timber.

7.50 Dry draw, 50 lks. wide, drains SW.

35.00 Dry draw, 30 lks. wide, drains SW.

39.99 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor. with brass cap mkd.

$\frac{1}{4}$
S 17

S 20

1912

From which

Subdivision of T. 36 S., R. 23 E.

Chains.

- A cedar, 24 ins. in diam., bears N. 25° E.,
63 lks. dist., mkd. $\frac{1}{4}$ S17 BT.
- A cedar, 18 ins. in diam., bears S. 42° W.,
29 lks. dist., mkd. $\frac{1}{4}$ S 20 BT.
- 49.00 Dry draw, 10 lks. wide, drains S.
- 67.00 Leave dense cedars, bears NE. and SW., enter scattering cedar and pinon timber.
- 76.00 Dry draw, 10 lks. wide, 3 lks. deep, drains SW.
- 79.98 The cor. of secs. 17, 18, 19 and 20.
Land rolling.
Soil, sandy loam; 2nd rate.
Timber cedar and pinon.
-
- Thence I run
S. $89^{\circ} 43'$ W., on random line bet. secs. 18 and 19.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 77.40 Intersect the Colo. G. Mer., at the cor. of secs. 13, 18,
19, and 24. A sandstone 3x9x6 ins. above ground, witnessed
as described by the Surveyor General.
Thence, N. $89^{\circ} 43'$ E., on true line bet. secs. 18 and 19.
Over broken rolling mesa, covered with dense cedar and
pinon timber.
- 21.40 Rim rock on W. edge of Recapture Canon, 35 ft. high, bears
N. and S.; desc. abruptly over rocky W. slope of canon.
- 23.00 Recapture Creek, 10 lks. wide, water in pools, course S.,
200 ft. below top of mesa.; asc. abruptly over rocky
broken slope of canon.
- 27.00 Rim rock on E. edge of Recapture Canon, 30 ft. high, bears
N. and S., continue asc., over broken rocky slope.
- 35.00 Top of asc., bears N. and S.; desc., gradually.
- 37.40 Top of rocky ridge, bears N. and S.
Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
a mound of rock and earth, for the $\frac{1}{4}$ sec. cor., with brass
cap mkd.

$\frac{1}{4}$ S 18 ✓

S 19 ✓
1912

Chains. Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Desc. over a series of rocky ridges and ravines.

48.40 Dry draw, 30 lks. wide, 10 lks. deep, drains SE.; asc.

51.00 Top of asc., bears N. and S.; desc.

52.40 Dry draw, 1 ch. wide, 10 lks. deep, drains SW.; asc.

62.50 Top of gradual asc., bears NE. and SW., continue over rolling mesa.

77.40 The cor. of secs. 17, 18, 19 and 20.
Land, rolling and broken.
Soil, sandy and stony; 4th rate.
Timber, cedar and pinon.

August 6, 1912

August 12: At 9h35m, a. m., 1. m. t., I set off $37^{\circ} 41'$ N. on the lat. arc, $14^{\circ} 57' 30''$ N. on the decl. arc, and at the cor. of secs. 17, 18, 19 and 20, determine the meridian with the solar.

Thence I run

N. $0^{\circ} 03'$ W., bet. secs. 17 and 18.

Over rolling mesa, covered with dense cedar and pinon timber.

8.00 Dry draw, 20 lks. wide, drains SW.

14.00 Start slight desc., over rocky slope of mesa.

32.00 Dry draw, 1 ch. wide, 5 lks. deep, drains SW.

34.00 Dry draw, 2 chs. wide, 5 lks. deep, drains SW.

38.00 Desc. abruptly over rim rock, 40 ft. high, bears NE. and SW.

39.50 Dry draw, in canon, 50 ft. deep, drains SW.; asc.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$$\begin{array}{c|c} \frac{1}{4} & \\ \hline S & 18 | S & 17 \end{array}$$

1912

Dig pits, 18x18x12 ins., N. and S. of post., 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

No trees in canon fit for bearing trees.

Subdivision of T. 36 S., R. 23 E.

Chains.

- 46.00 Rim rock 40 ft. high, bears NE. and SW., continue over rolling mesa, covered with dense cedar and pinon timber.
- 69.00 Dry draw, 50 lks. wide, drains SE.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of sec. 7, 8, 17 and 18, with brass cap mkd.

T 36	S R 23 E
S 7	S 8
<hr/>	
S 18	S 17

1912

From which

A pinon, 5 ins. in diam., bears N. 64° E.,
50 lks. dist., mkd. T36S R23E S8 BT.

A pinon, 6 ins. in diam., bears S. $81^{\circ}30' E.$,
100 lks. dist., mkd. T36S R23E S17 BT.

A pinon, 6 ins. in diam., bears S. $81^{\circ} W.$,
51 lks. dist., mkd. T36S R23E S18 BT.

A cedar, 6 ins. in diam., bears N. $10^{\circ} W.$,
29 lks. dist., mkd. T36S R23E S7 BT.

Land rolling and broken,

Soil, sandy loam and rocky; 3rd rate.

Timber, cedar and pinon.

August 12, 1912

August 13: At 8h05m, a. m., l. m. t., I set off $37^{\circ} 41'$
 $30''$ N. on the lat. arc, $14^{\circ} 41'$ N. on the decl. arc,
and at the cor. of secs. 7, 8, 17 and 18, determine
the merodoan with the solar.

Thence I run

N. $89^{\circ} 49' E.$, on random line bet. secs. 8 and 17.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.03 Intersect the N. and S. line, 2 lks. N. of the cor. of s
secs. 8, 9, 16 and 17.
- Thence, S. $89^{\circ} 50' W.$, on true line bet. secs. 8 and 17.
Over rolling mesa, covered with dense cedar and pinon

Subdivision of T. 36 S., R. 23 E.

Chains.

- (82)
- timber.
- 8.00 Leave dense cedar and pinon timber, bears N. and S.; enter open sage brush park.
- 32.00 Leave open sage brush park, bears N. and S.; enter dense cedar and pinon timber.
- 40.01 $\frac{1}{2}$ Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

 $\frac{1}{4}$
S 8 ✓

S 17 ✓

1912

From which

A pinon, 10 ins. in diam., bears N. 45° E.,
 53 lks. dist., mkd. $\frac{1}{4}$ S8 BT.

A pinon, 20 ins. in diam., bears S. 20° W.,
 50 lks. dist., mkd. $\frac{1}{4}$ S17 BT.

- 43.00 Dry draw, 1 ch. wide, 5 lks. deep, drains S. and SW.; asc. gradually.
- 51.00 Top of asc., bears N. and S.; desc. gradually.
- 61.00 Dry draw, 20 lks. wide, drains S.
- 67.00 Bottom of desc., bears NE. and S.; asc. gradually.
- 68.00 Dry draw, 30 lks. wide, 5 lks. deep, drains S.
- 77.50 Dry draw, 50 lks. wide, 5 lks. deep, drains SE.
- 80.03 The cor. of secs. 7, 8, 17 and 18.
 Land, rolling.

Soil, sandy loam and stony; 4th rate.

Timber, cedar and pinon.

Aug. 13: At 12h 05m, p. m., 1. m. t., I set off $14^\circ 37' 30''$ N. on the decl. arc, and at the cor. of secs. 7, 8, 17 and 18, observe the sun on the meridian, the resulting lat. is $37^\circ 41'$ N.

Thence I run

S. $89^\circ 43'$ W., on a random line bet. secs. 7 and 18.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.

- 77.41 Intersect the Colo. G. Mer., at the cor. of secs. 7, 12, 13 and 18. A sand stone, 5x5x9' ins. above ground, witnesse

Subdivision of T. 36 S., R. 23 E.

- Chains. as described by the Surveyor General.
 Thence, N. $89^{\circ} 43'$ E., on true line bet. secs. 7 and 18.
 Desc. gradually over gravelly and sandy bottom of Recapture Canon, covered w/ dense greasewood undergrowth.
 5.30 Recapture Creek, 20 lks. wide, 10 ft. deep, water in holes, course S.; asc. abruptly over broken E. slope of canon over a series of ridges and ravines, through scattering scrub cedar timber.
 34.00 Rim rock, 75 ft. high, bears NE. and S., 200 ft. above creek; continue over broken mesa covered with dense cedar and pinon timber.
 37.41 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S $\frac{1}{4}$ 7 ✓S 18 ✓
1912

- Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. N. of cor., No trees within limits fit for bearing trees.
 ✓ 77.41 The cor. of secs. 7, 8, 17 and 18.
 Land broken.
 Soil, sandy, stony and gravel; 4th rate.
 Timber, scrub cedar and pinon.

August 13, 1912.

August 15: At 9h 04m, a. m., 1. m. t., I set off $37^{\circ} 41' 30''$ N. on the lat. arc, $14^{\circ} 03'$ N. on the decl. arc, and at the cor. of secs. 7, 8, 17 and 18, determine the meridian with the solar.

Thence I run

N. $0^{\circ} 03'$ W., bet. secs. 7 and 8.

Desc. gradually over rolling mesa, covered with scrub cedar and pinon timber.

- 27.20 Dim road, bears NE and SW.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

S $\frac{1}{4}$ 7 | S 8 ✓

1912

Subdivision of T. 36 S., R. 23 E.

Chains.

From which.

- A cedar, 8 ins. in diam., bears S. $71^{\circ}30' E.$,
27 lks. dist., mkd. $\frac{1}{2}$ S8 BT.
- A cedar, 8 ins. in diam., bears N. $16^{\circ} W.$,
27 lks. dist., mkd. $\frac{1}{2}$ S7 BT.
- 53.00 Start desc., over broken NW. slope of mesa, nears NE. and SW.
- 60.00 Rimrock, 40.00 ft. high, bears W. and NE.; desc. abruptly over broken slope of arm of Recapture Canon.
- 74.00 Dry draw, in bottom of canon, 200 ft. below top, 50 lks. wide, 20 lks. deep, drains SW.; asc. over broken N. slope of canon.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the cor. of secs. 5, 6, 7, and 8, with brass cap mkd.

T 36 S R 23 E

S 6	S 5
S 7	S 8

1912

From which,

A cedar, 24 ins. in diam., bears N. $89^{\circ} E.$,
62 lks. dist., mkd. T36S R23E S5 BT.

A cedar, 12 ins. in diam., bears S. $8^{\circ} E.$,
108 lks. dist., mkd. T36S R23E S8 BT.

A pinon, 8 ins. in diam., bears S. $48^{\circ} W.$,
55 lks. dist., mkd. T36S R23E S7 BT.

A cedar, 12 ins. in diam., bears N. $75^{\circ} W.$,
52 lks. dist., mkd. T36S R23E S6 BT.

Land rolling and broken.

Soil, sandy loam on mesa, above and sandy in canon, 2nd and 4th rate.

Timber, scrub cedar and pinon.

August, 15, 1912.

August 16: At 8h 34m, a. m., l. m. t., I set off $37^{\circ} 42' 30''$ N. on the lat. arc, $13^{\circ} 44' 30''$ N. on the decl.

(85)
Subdivision of T. 36 S., R. 23 E.

Chains.

arc, and at the cor. of secs. 5, 6, 7, and 8, determine the meridian with the solar.

Thence I run

N. $89^{\circ} 50'$ E., on random line bet. secs. 5 and 8.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.02 Intersect the N. and S. line, 2 lks. SW. of the cor. of secs. 4, 5, 8 and 9.

Thence, S. $89^{\circ} 51'$ W., on true line bet. secs. 5 and 8.

Deso. gradually over rolling mesa, covered with dense cedar and pinon timber.

27.00 Old Grayson-Monticello Road, bears NE. and SW.

36.00 Leave dense cedar and pinon timber, bears N. and S.; enter scattering cedar timber and sage brush undergrowth.

40.01 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground for the $\frac{1}{4}$ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 5

—
S 8

1912

From which

A cedar, 12 ins. in diam., bears N. 40° E.,
94 lks. dist., mkd. $\frac{1}{4}$ S 5 BT.

A cedar, 12 ins. in diam., bears S. 70° W.,
102 lks. dist., mkd. $\frac{1}{4}$ S 8 BT.

52.00 Start abrupt desc., over broken W. slope of mesa, bears NE. and SW.

60.00 Rim rock, 75 ft. high, bears NE. and SW., continue desc.
over broken E. slope of canon.

74.00 Dry draw, in bottom of canon, 1 ch. wide, 5 lks. deep,
drains SW.; asc.

80.02 The cor. of secs., 5, 6, 7 and 8.

Land, rolling and broken.

Soil, sandy loam on mesa, adobe and sandy in canon; 1st
and 4th rate.

Timber, scrub cedar and pinon.

Subdivision of T. 36 S., R. 23 E.

Chains.

on decl. and at the cor. of secs., 5, 6, 7 and 8, observe
the sun on the meridian, the resulting lat. is $37^{\circ} 43'$.

Thence I run

S: $89^{\circ} 43'$ W., on random line bet. secs. 6 and 7.40.00 Set temp. $\frac{1}{4}$ sec. cor.76.28 Intersect the Colo. G. Mer.; 19 lks. S. of the cor. of
secs. 1, 6, 7, & 12. A sandstone 8x8x12 ins. above ground,
witnessed as described by the Surveyor General;
Thence, N. $89^{\circ} 51'$ E., on true line bet. secs. 6 and 7.

Over land broken with deep canons, and covered with
dense cedar and pinon timber

10.00 Dry draw in bottom of canon, drains S.; asc. abruptly
over broken E. slope of canon.21.80 Rim rock, 40 ft. high, bears N. and S., continue over
point, projecting S.; 150' ft. above bottom of canon.28.80 Bluff-Grayson-Monticello Stage Road, bears N. 15° E., and
S. 15° W.34.60 Rim rock, 40 ft. high, bears N. and S., desc. abruptly
over broken E. slope of canon.36.28 Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in
the ground for the $\frac{1}{4}$ sec. cor., bet. secs. 6 and 7,
with brass cap mkd. $\frac{1}{4}$
S 6 ✓

S 7 ✓

1912

From which

A cedar, 12 ins. in diam., bears N. 65° E.,
11 lks. dist., mkd. $\frac{1}{4}$ S 6 BT.

A pine, 12 ins. in diam., bears S. 11° W.,
70 lks. dist., mkd. $\frac{1}{4}$ S 7 BT.

47.30 Dry draw, in canon, 1 ch. wide, 175 ft. below top of mesa
drains S.; asc. over a series of ridges and ravines.

76.28 The cor. of secs. 5, 6, 7 and 8.

Land broken.

Soil, adobe and gravel; 4th rate.

Timber, cedar and pinon pine.

August 15, 1912.

Chains.

August 16: At 2h 04m, p. m., l. m. t., I set off $37^{\circ} 42' 30''$ N. on the lat. arc, $13^{\circ} 40'$ N. on the decl. arc and at the cor. of secs. 5, 6, 7 and 8, determine the meridian with the solar.

Thence I run

N. $0^{\circ} 03'$ W., bet. secs. 5 and 6.

Asc. over broken N. slope of canon over a series of small rocky ridges and ravines, covered with dense cedar and pinon timber.

16.00 Rim rock, 50 ft. high, bears E. and W., continue over broken mesa.

32.90 Intersect the Seventh Standard Parallel S., 14.49 chs., W. of the $\frac{1}{4}$ sec. cor. for secs. 32, which is An iron post, 3 ft. long, 1 in. in diam., mkd. and witnessed as described by the Surveyor General.

At the intersection point I set

An iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for the closing cor. of secs. 5 and 6, with brass cap mkd.

T 35 S R23 E	
S 31	S 32
<hr/>	
C.C.	
S 6	S 5
T 36 S R 23' E	
1912	

From which, a pinon,

A pinon, 16 ins. in diam., bears S. 12° E., 19 lks. dist., mkd. T36S R23E S5 CC.BT.

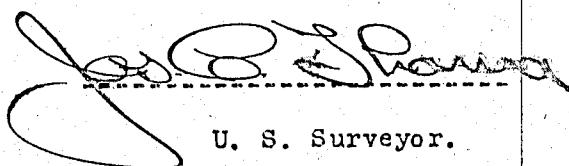
A pinon, 10 ins. in diam., bears S. 71° W., 27 lks. dist., mkd. T36S R23E S6 CC BT.

Land, broken.

Soil, sandy loam and adobe; 2nd and 4th rates.

Timber, cedar and pinon.

August 16, 1912.



U. S. Surveyor.

For oaths of U.S. Surveyors and certificate of assistants
see Book "Y." of this Group.

Volume

#

R0412

Chains.

- In order to close Sec. 7, T. 36 S., R. 23 E., I retrace the Colo. Guide Meridian as follows:
- From the cor. of secs. 7, 12, 13 and 18, T. 36 S., Rgs. 22 and 23 E., which is
- A sand stone ~~5x5x9~~ ins. above ground, firmly set, mkd and witnessed as described by the Surveyor General.
- August 29, 1912, At this cor. I set off $37^{\circ} 41'$ N. on the lat. arc, $9^{\circ} 16'$ N. on the decl. arc, and at 2h 30m, p.m. l. m. t., determine the meridian with the solar.
- Thence I run
- North, retracing the Colo. G. M., bet. secs. 7 and 12
- 2.00 Enter bottom land of Recapture Creek Canon, NW. & SE.
- 12.00 S. bank of Recapture Creek bed, 3 chs. wide, NW. & SE.
- 14.00 Recapture Creek, 10 lks. wide, 2 lks. deep, water clear, course SE.
- 15.00 N. bank of Creek bed, NW. & SE., asc. grad. over sage brush flat in canon bottom.
- 23.00 Monticello-Brayson road, bears NE. & SW.
- 24.00 Leave canon bottom, NW. & SE., asc. over series of ridges and ravines.
- 40.00 Fall 44 lks. W. of the $\frac{1}{4}$ cor., which is
- A sand stone, 8x12x8 ins. above ground, formly set, mkd and witnessed as described by the Surveyor General.
- 52.00 Top of asc., desc. over SE. slope.
- 58.00 Dry draw, 50 lks. wide, drains SW.; asc. over broken W. slope.
- 80.16 Fall 88 lks. W. of cor. of secs. 1, 6, 7 and 12, which is
- A sand stone, 8x8x12 ins. above ground, loosely set in mound of stone, witnessed and described by the Surveyor General. This falling answers to the course of $N.0^{\circ} 38'$ E.
-
- North, on retracement of the Colo. G. M. bet. secs. 1 and 6.
- Asc. NW. slope of canon, over a series of ridges and ravines, through scattering scrub cedar and pinon timber.
- 3.00 Top of mesa, bears NW. and SE., continue over same.

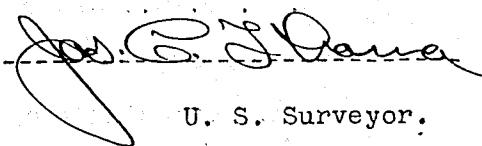
Chains.

33.17 Fall 13 lks. W. of the closing cor. on the Seventh Std.

Par. S., which is
A 3 in. iron post, firmly set., mkd. and witnessed as
described by the Surveyor General.

This falling answers to the course of N. $0^{\circ} 14' E.$

August 29, 1912.


J. C. J. Davis

U. S. Surveyor.

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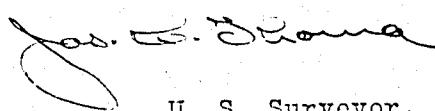
T. 36 S., R. 25 E.

Latitudes, departures, and closing errors in the boundaries
of T. 36 S., R. 25 E.

Lines designated.	Course.	Dist.	Latitude.		Departure.	
			N.	S.	E.	W.
S. bdy.	S. 89° 46' W.	477.50	• • •	1.93	• • •	.477.50
Colo. G. N.	North.	320.00	320.00	• • •	• • •	•
Colo. G. N.	N. 0 38' E.	80.16	80.16	• • •	• • •	.89
Colo. G. N.	N. 0 14' E.	33.17	33.17	• • •	• • •	.14
7th Std. Par.	East.	476.08	• • •	• • •	476.08	
S. bdy.	South.	431.14	• • •	431.14	• • •	.50
Convergency	• • •	50	• • •	• • •	• • •	
Totals.	• • •		433.55	455.07	477.61	477.50
			433.07	Error in 477.50	dep.	.11
	Error in lat. . . .	.26				

For oaths of U. S. Surveyors and certificates of assistants

See _____ of this Group.



U. S. Surveyor.

Township 36 South, Range 23 East.

GENERAL DESCRIPTION.

This township is mostly rolling and broken surface mesa, and covered with pinon and cedar. Much of the cedar is large enough for fencing posts. There is clumps of yellow pine, in the northern part with timber large enough for building purposes, and for manufacturing into lumber, but not in sufficient number to justify erection of Saw Mills.

The mesas are badly cut up by deep canons, usually with perpendicular sandstone ledges at the edges, on the borders of the mesas.

The soil on the mesas is apparently mostly rich bench soil, and would be very fertile under irrigation.

In the central and northern portions, are some open strips of sage brush, that appears to have been old burns, on which the timber has been destroyed by fire.

There are numerous small springs in the canons, only one of which is large enough to supply a considerable amount of water. This is in the N.E. $\frac{1}{4}$ of sec. I4, at the head of a small canon. There is a stock carral adjoining it to the west; claimant unknown.

There is no generally used roads in the township.

The Bluff-Monticello stage road formerly ran in a Northeasterly and Southwesterly direction through the westerly part, but it is seldom used now, although possible for pack trains, or light loads.

There is a very dim wagon trail NW & SE. in the easterly part of the township. Used only by stockmen.

There are numerous remains of old mesa ruins and cliff houses used by the prehistoric race, to be seen.

No settlers, and the only improvements is a pole fence in secs. 3 and 4, which forms part of a large stock pasture which is not used much at present; claimant unknown.

The western rim of Montezuma Canon, skirts the E.bdy of this township, very closely.

This is a series of washed and sharp ridges forming a valley, 400 or 500 ft. below the mesa, and is 10 or 12

BOOK #112

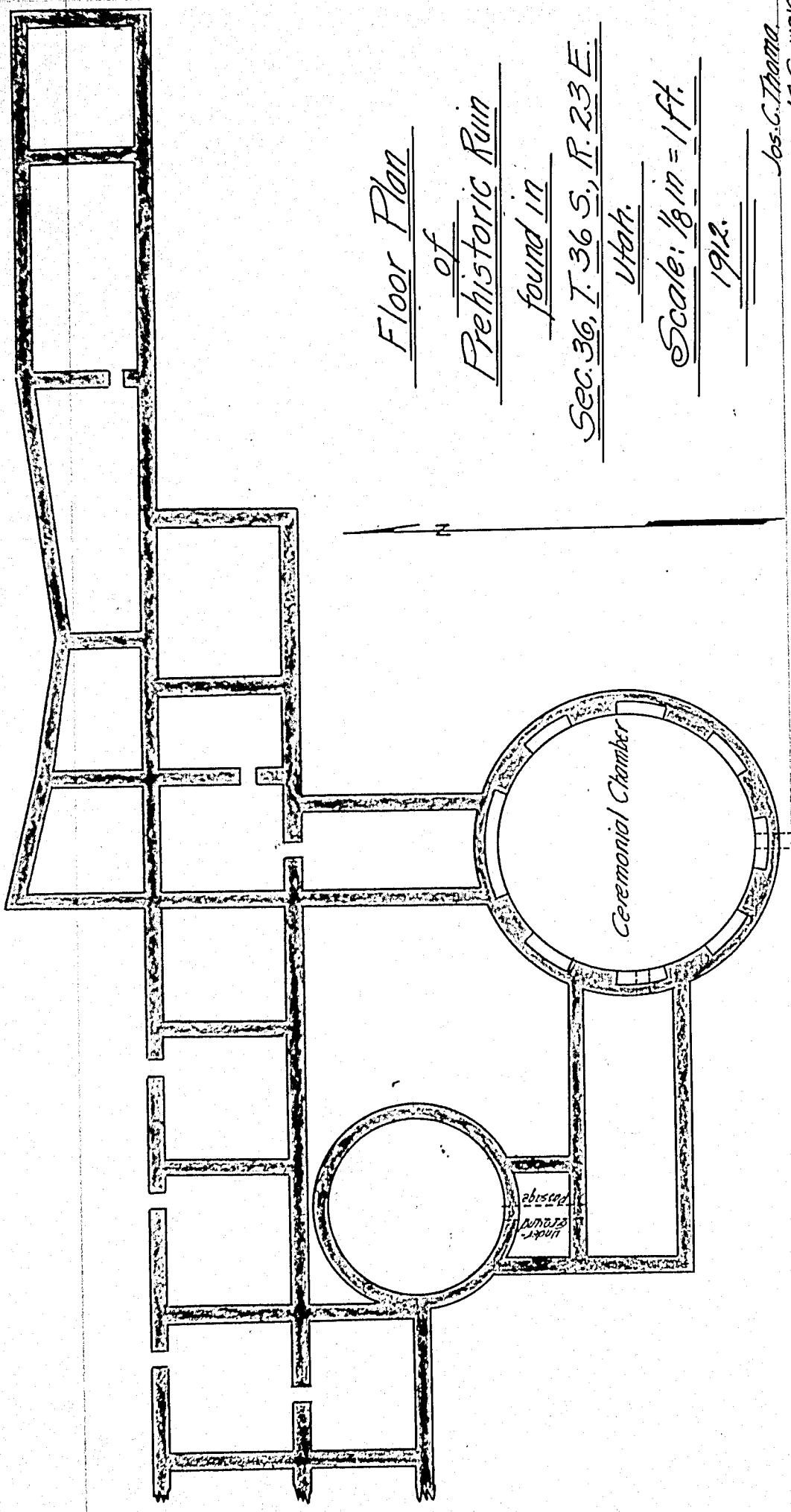
miles wide, extending to all appearance to the state line, on the E. This canon is a series of breaks, the soil being loose, washes badly, and there is little vegetation, except scrub cedar and pinon, from scattering to dense growth. The district is practically worthless, there being little grazing and no ground of consequence that could be cultivated.

Daniel B. Miller

U.S. Surveyor.

Jos. C. Shawa

U.S. Surveyor.



Floor Plan

of
Prehistoric Ruin

found in

Sec. 36, T. 36 S., R. 23 E.

Utah.

Scale: $\frac{1}{8} \text{ in.} = 1 \text{ ft.}$

1912.

Jos. C. Thomas
U.S. Surveyor

Air Shaft.

FINAL OATH OF UNITED STATES SURVEYOR.

I, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for bearing date of the day of 191 , I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of

For final oaths of U.S. Surveyors see book "V" T. 39. S., R. 36. E.

..... of the Meridian, in the State of which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said and sworn to before me }
this day of 191 }



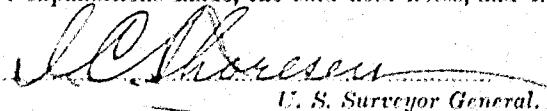
APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 3, 1915.

The foregoing field notes of the survey of the subdivisional lines of Township 36 South, Range 23 East; and retracement of part of the Colorado Meridian, Township 36 South, between Ranges 22 and 23 East of the Salt Lake Base and Meridian, Utah,

executed by Daniel R. Miller and Joseph C. Thoma under his special instructions dated March 26 1912, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.


J. C. Thoma
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in has been correctly copied from the original notes on file in this office.

4-27-11
U. S. Surveyor General.